SHARP **SERVICE MANUAL**

No. S4024CDBA160H

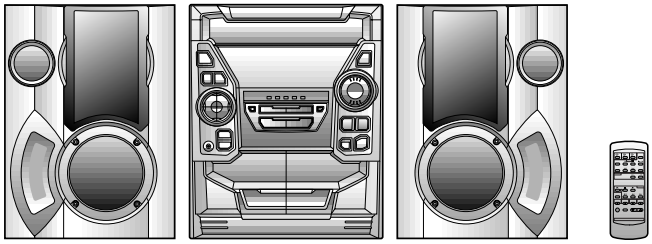

Illustration: CD-BA160H

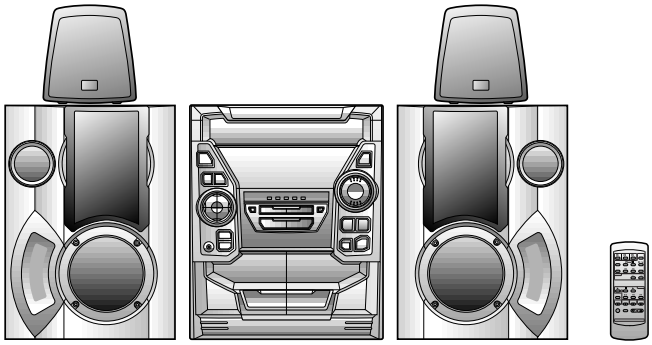

Illustration: CD-BA1700H

CD-BA160H
CD-BA1700H

CD-BA160H mini component system consisting of CD-BA160H (main unit) and CP-BA160H (speaker system).

CD-BA1700H mini component system consisting of CD-BA1700H (main unit), CP-BA1700H (front speakers) and GBOXS0041AWM1 (surround speakers).

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

- **Note for users in U.K.**
  Recording and playback of any material may require consent, which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

DIFFERENCE BETWEEN CD-BA160H AND CD-BA1700H

SECTION	CD-BA160H	CD-BA1700H
CD Digital Output	None	Used
Speaker terminal	2 speaker	4 speaker
Surround speaker	None	Used

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

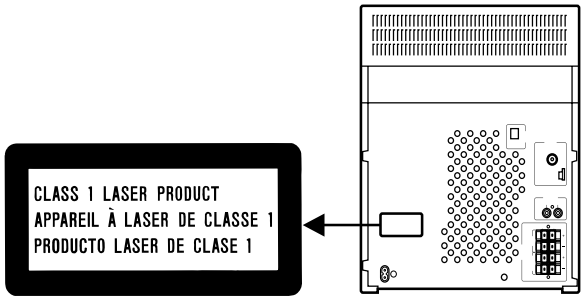
CD-BA160H/1700H

SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class I Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam.

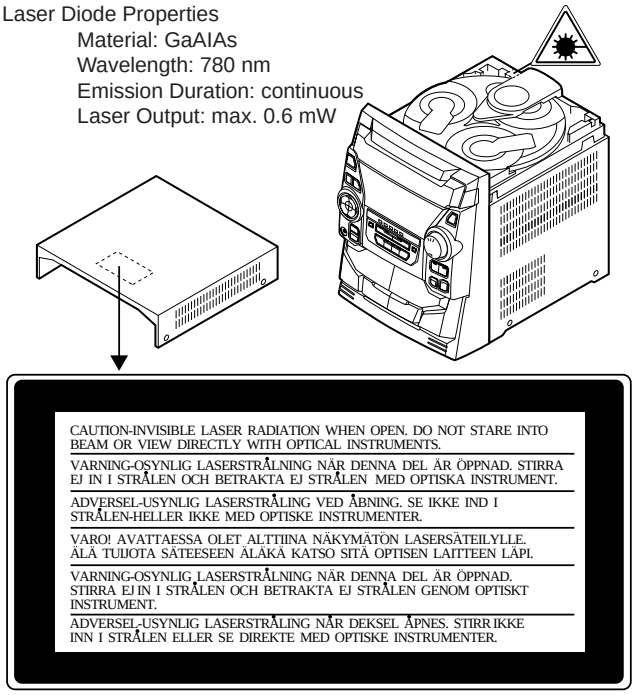
(1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
(2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
(3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
(4) Under no circumstances look directly into the Pickup Lens at any time.
(5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.



CAUTION
Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

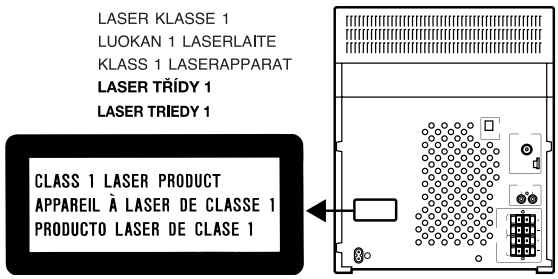
(CD-BA1700H for U.K. Only)

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW


CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.
VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

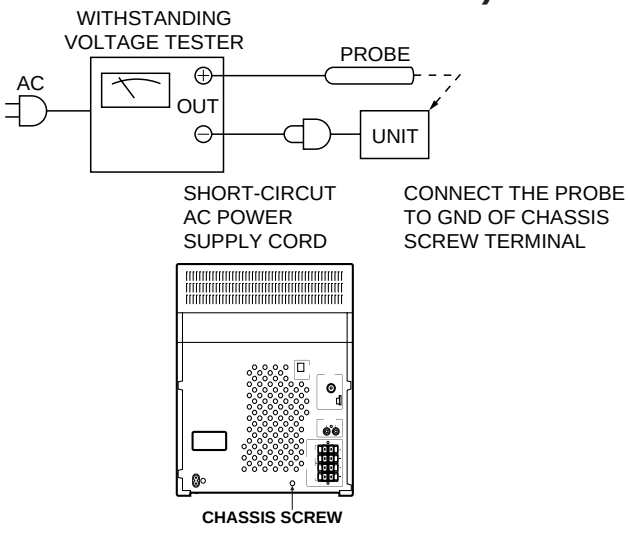


(For Europe)

IMPORTANT SERVICE NOTES (CD-BA1700H FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.
Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current(Cutoff current)	4 mA
Unit	
Judgment	
OK: The “GOOD” lamp lights. NG: The “NG” lamp lights and the buzzor sounds.	



FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

CD-BA160H/1700H

■ General

Power source:	AC 230 V, 50 Hz
Power consumption:	95 W
Dimensions:	Width; 270 mm (10-5/8") Height; 330 mm (13") Depth; 375 mm (14-6/8")
Weight:	6.4 kg (14.0 lbs.)

■ Amplifier section (CD-BA160H)

Output power:	PMPO; 320 W MPO; 160 W (80 W + 80 W) (DIN 45 324) RMS; 100 W (50 W + 50 W) (DIN 45 324) RMS; 74 W (37 W + 37 W) (DIN 45 500)
Input terminals:	Video/Auxiliary (audio signal); 500 mV/47 kohms
Output terminals:	Front speakers; 6 ohms Headphones; 16-50 ohms (recom mended; 32 ohms)

■ Amplifier section (CD-BA1700H for Europe)

Output power:	PMPO; 320 W MPO; 160 W (80 W + 80 W) (DIN45 324) RMS; 100 W (50 W + 50 W) (DIN 45 324) RMS; 74 W (37 W + 37 W) (DIN 45 500)
Input terminals:	Video/Auxiliary (audio signal); 500 mV/47 kohms
Output terminals:	Front speakers; 8 ohms Surround speakers; 16 ohms Headphones; 16-50 ohms (recommended; 32 ohms) CD digital output (optical)

■ Amplifier section (CD-BA1700H for U.K.)

Output power:	RMS; 100 W (50 W + 50 W) (10 % T.H.D.) RMS; 74 W (37 W + 37 W) (0.9 % T.H.D.)
Input terminals:	Video/Auxiliary (audio signal); 500 mV/47 kohms
Output terminals:	Front speakers; 8 ohms Surround speakers; 16 ohms Headphones; 16-50 ohms (recommended; 32 ohms) CD digital output (optical)

■ Compact disc player section

Type:	3-disc multi-play compact disc player
Signal readout:	Non-contact, 3-beam semi-conductor laser pickup
D/A converter:	1-bit D/A converter
Frequency response:	20 - 20,000 Hz
Dynamic range:	90 dB (1 kHz)

■ Tuner section

Frequency range:	FM; 87.5 - 108 MHz AM; 522 - 1,620 kHz

■ Cassette deck section

Frequency response:	50 - 14,000 Hz (Normal tape)
Motor:	DC motor with electronic governor x 1
Bias and erasure system:	AC
Tape speed:	4.76 cm/sec. (1-7/8 ips.)
Signal/noise ratio:	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter: (For Europe)	0.35 % (DIN 45 511)
Wow and flutter: (For U.K)	0.3 % (WRMS)
Heads:	TAPE-1: Playback x 1 TAPE-2: Recording/playback x 1 Erase x 1

CP-BA160H

Type:	3-way [10 cm (4") woofer x 2 and 5 cm (2") tweeter]
Maximum input power:	100 W
Rated input power:	50 W
Impedance:	6 ohms
Dimensions:	Width; 220 mm (8-11/16") Height; 330 mm (13") Depth; 227 mm (8-15/16")
Weight:	3.0 kg (6.6 lbs.)/each

CP-BA1700H

Type:	3-way [10 cm (4") woofer x 2 and 5 cm (2") tweeter]
Maximum input power:	80 W
Rated input power:	40 W
Impedance:	8 ohms
Dimensions:	Width; 220 mm (8-11/16") Height; 330 mm (13") Depth; 227 mm (8-15/16")
Weight:	3.0 kg (6.8 lbs.)/each

GBOXS0041AWM1

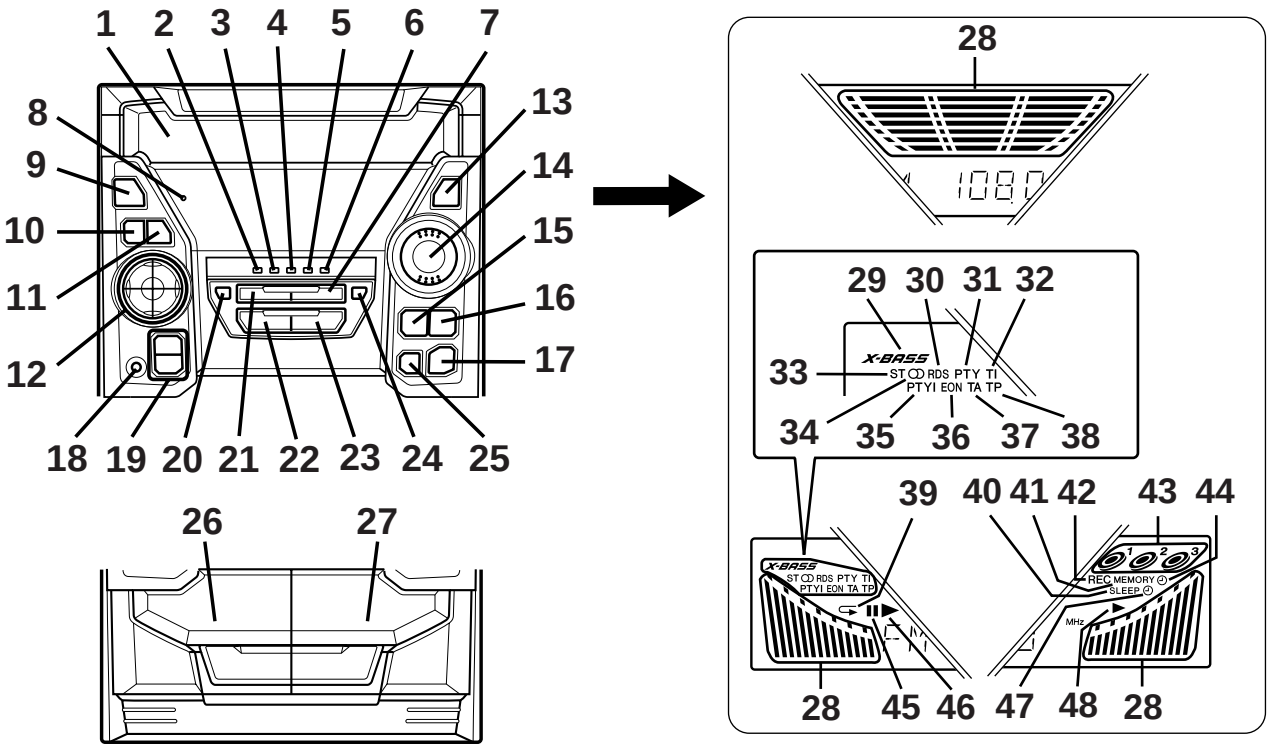
Type:	10 cm (4") full-range speaker
Maximum input power:	30 W
Rated input power:	15 W
Impedance:	16 ohms
Dimensions:	Width; 170 mm (6-3/4") Height; 170 mm (6-3/4") Depth; 88 mm (3-1/2")
Weight:	0.5 kg (1.0 lbs.)/each

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

CD-BA160H/1700H

■ Front panel

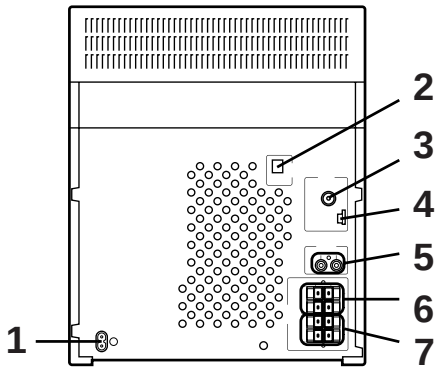


1. (CD) Disc Tray
2. (TUNER) Programme Type/Traffic Information Search Button
3. EON Button
4. ASPM Button
5. Display Mode Selector Button
6. Station Selector Button
7. (CD) Track Up/Cue Button
   (TUNER) Preset Up Button
   (TAPE 2) Fast Forward Button
8. Timer Set Indicator
9. On/Stand-by Button
10. Clock Button
11. Timer/Sleep Button
12. Function Selector Buttons
13. Dimmer Button
14. Volume Up/Down Buttons
15. Equalizer Mode Selector Button
16. Extra Bass/Demo Mode Button
17. (CD) Open/Close Button
18. Headphone Socket
19. Tuning and Time Up/Down Buttons
20. Memory/Set Button
21. (CD) Track Down/Review Button
    (TUNER) Preset Down Button
    (TAPE 2) Rewind Button
22. (CD/TAPE) Stop Button
23. (CD) Play/Repeat Button
    (TAPE) Play Button
24. (TAPE 2) Record Pause Button
25. (CD) Disc Skip Button

26. (TAPE 1) Cassette Compartment
27. (TAPE 2) Cassette Compartment
28. Spectrum Analyzer/Volume Level Indicator
29. Extra Bass Indicator
30. RDS Indicator
31. Programme Type Indicator
32. Traffic Information Indicator
33. FM Stereo Mode Indicator
34. FM Stereo Indicator
35. Dynamic PTY Indicator
36. EON Indicator
37. Traffic Announcement Indicator
38. Traffic Programme Indicator
39. (CD) Repeat Indicator
40. Sleep Indicator
41. (CD/TUNER) Memory Indicator
42. Record Indicator
43. (CD) Disc Number Indicators
44. Timer Play Indicator
45. (CD) Pause Indicator
46. (CD) Play Indicator
47. Timer Record Indicator
48. (TAPE) Play Indicator

CD-BA160H/1700H

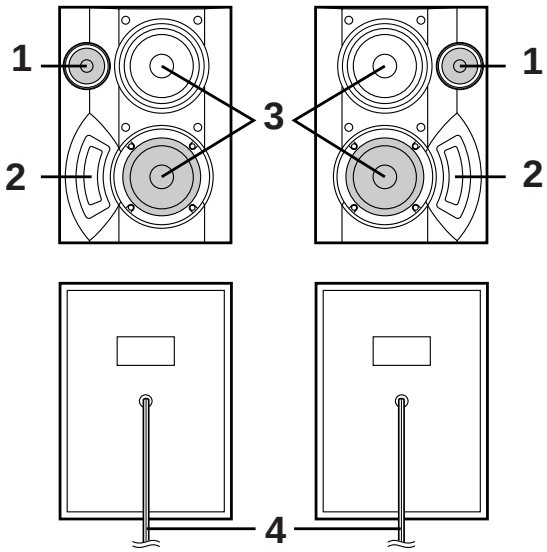
■ Rear panel (Illustration: CD-BA1700H)



1. AC Power Input Socket
2. CD Digital Output Socket (CD-BA1700H Only)
3. FM 75 Ohms Aerial Socket
4. AM Loop Aerial Socket
5. Video/Auxiliary (Audio Signal) Input Sockets
6. Front Speaker Terminals
7. Surround Speaker Terminals (CD-BA1700H Only)

CP-BA160H/1700H

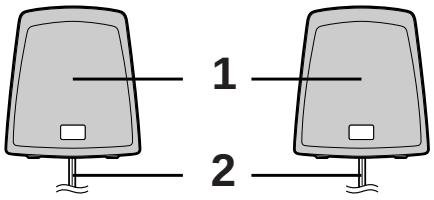
■ Front speaker



1. Tweeter
2. Bass Reflex Duct
3. Woofer
4. Speaker Wire

GBOXS0041AWM1

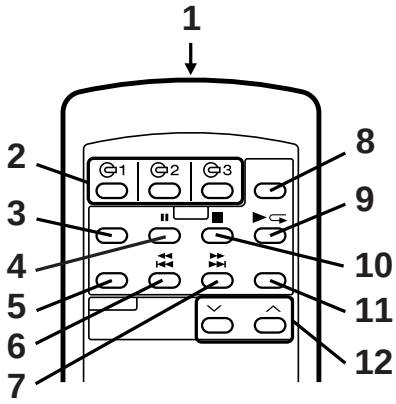
■ Surround speaker (CD-BA1700H Only)

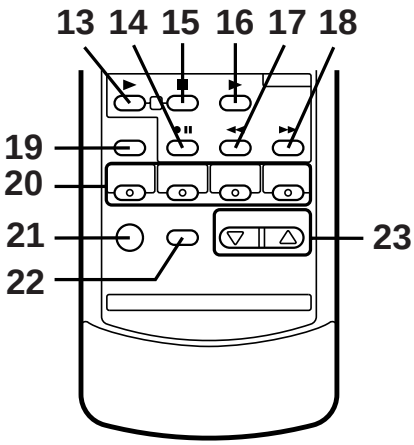


1. Full-Range Speaker
2. Speaker Wire

CD-BA160H/1700H

■ Remote control





1. Remote Control Transmitter LED

● CD control section
2. Disc Number Select Buttons
3. Memory Button
4. Pause Button
5. Clear Button
6. Track Down/Review Button
7. Track Up/Cue Button
8. Disc Skip Button
9. Play/Repeat Button
10. Stop Button
11. Random Button

● Tuner control section
12. Preset Up/Down Buttons

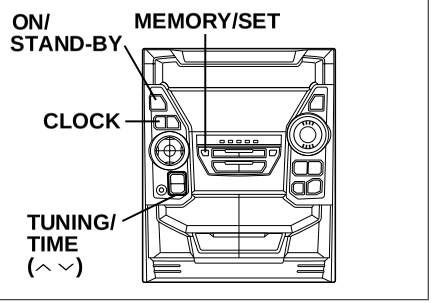
● Tape control section
13. (TAPE 1) Play Button
14. (TAPE 2) Record Pause Button
15. (TAPE 1/2) Stop Button
16. (TAPE 2) Play Button
17. (TAPE 2) Rewind Button
18. (TAPE 2) Fast Forward Button

● Common section
19. Equalizer Mode Selector Button
20. Function Selector Buttons
21. On/Stand-by Button
22. Extra Bass Button
23. Volume Up/Down Buttons

SETTING THE CLOCK

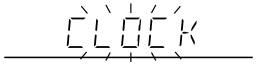
In this example, the clock is set for the 24-hour (0:00) system.

(Main unit operation)

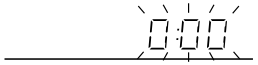


1 Press the ON/STAND-BY button to enter the stand-by mode.

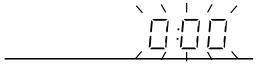
2 Press the CLOCK button.



3 Within 5 seconds, press the MEMORY/SET button.



4 Press the TUNING/TIME (∨ or ∧) button to select the time display mode.



0:00 ⟷ AM 0:00 ⟷ AM 12:00

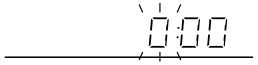
"0:00" → The 24-hour display will appear. (0:00 - 23:59)

"AM 0:00" → The 12-hour display will appear. (AM 0:00 - PM 11:59)

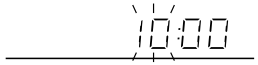
"AM 12:00" → The 12-hour display will appear. (AM 12:00 - PM 11:59)

● Note that this can only be set when the unit is first installed or it has been reset (see page 33).

5 Press the MEMORY/SET button.

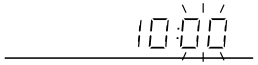


6 Press the TUNING/TIME (∨ or ∧) button to adjust the hour.

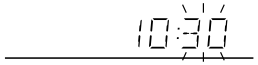


● Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Hold it down to advance continuously.
● When the 12-hour display is selected, "AM" will change automatically to "PM".

7 Press the MEMORY/SET button.

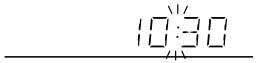


8 Press the TUNING/TIME (∨ or ∧) button to adjust the minutes.



● Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
● The hour setting will not advance even if minutes advance from "59" to "00".

9 Press the MEMORY/SET button.



● The clock starts operating from "0" second. (Seconds are not displayed.) And then the clock display will disappear after a few seconds.

To see the time display:
Press the CLOCK button.
● The time display will appear for about 5 seconds.

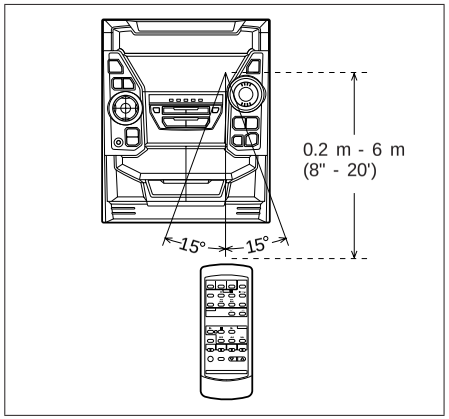
Note:
● The clock display will flash on and off at the push of the CLOCK button when the AC power supply is restored after a power failure occurs or after the AC power lead is disconnected. If this happens, follow the procedure below to change the clock time.

To change the clock time:
1 Press the CLOCK button.
2 Within 5 seconds, press the MEMORY/SET button.
3 Perform steps 6 - 9 above.

To change the time display mode:
1 Perform steps 1 - 2 in "RESETTING THE MICROCOMPUTER",.
2 Perform steps 1 - 9 above.

PREPARATION FOR USE

■ Remote control



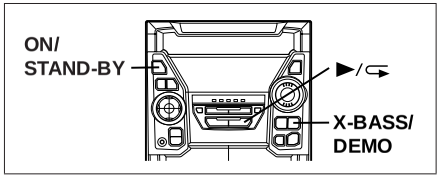
Notes concerning use:
● Replace the batteries if the operating distance is reduced or if the operation becomes erratic.
● Periodically clean the transmitter LED on the remote control and the sensor on the main unit with a soft cloth.
● Exposing the sensor on the main unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
● Keep the remote control away from moisture, excessive heat, shock, and vibrations.

RESETTING THE MICROCOMPUTER

Reset the microcomputer under the following conditions:
● To erase all of the stored memory contents (clock and timer settings, and tuner and CD presets).
● If the display is not correct.
● If the operation is not correct.

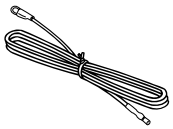
1 Press the ON/STAND-BY button to enter the stand-by mode.

2 Whilst pressing down the ► / ⮌ button and the X-BASS/DEMO button, hold down the ON/STAND-BY button for at least 1 second.
● "CLEAR AL" will appear.

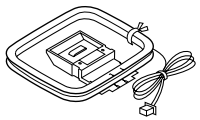


Caution:
● The operation explained above will erase all data stored in memory including clock and timer settings, and tuner and CD presets.

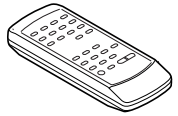
1 Check the supplied accessories



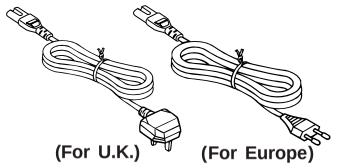
FM aerial × 1



AM loop aerial × 1



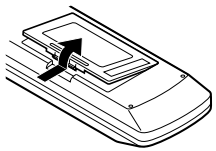
Remote control × 1



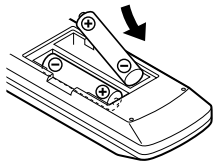
AC power lead × 1

2 Putting batteries into the remote control

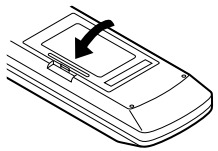
1 Remove the battery cover.



2 Insert the batteries.

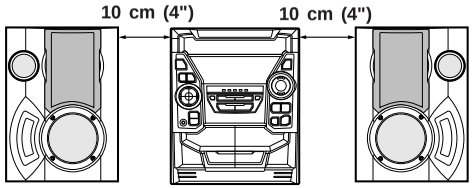


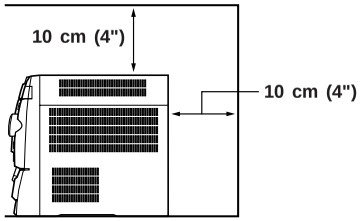
3 Replace the battery cover.



● 2 "AA" size batteries
(UM/SUM-3, R6, HP-7 or similar)

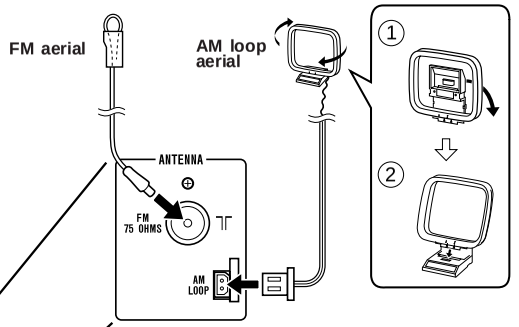
3 Placing the system



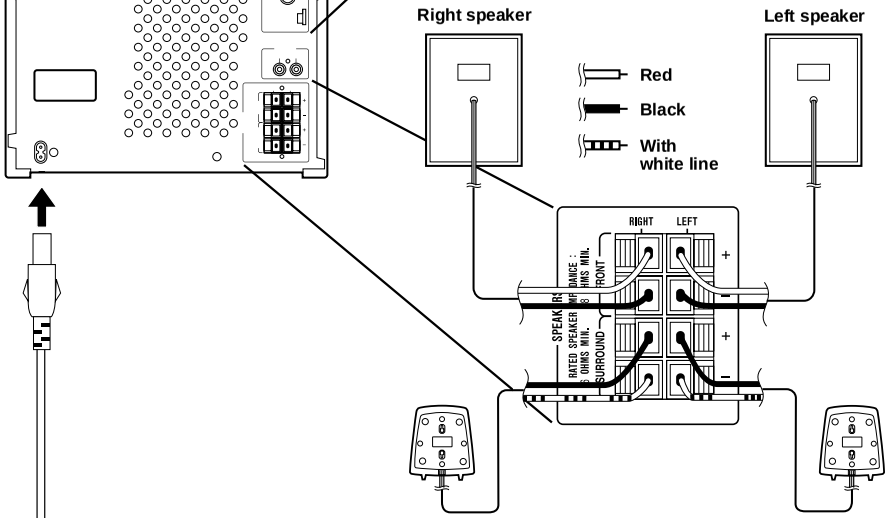


4 Connections

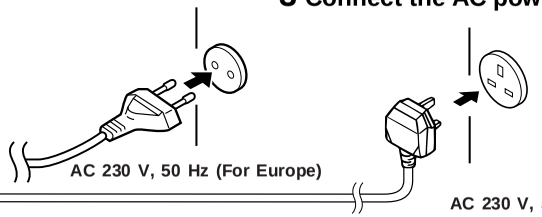
1 Connect the AM and FM aerials.



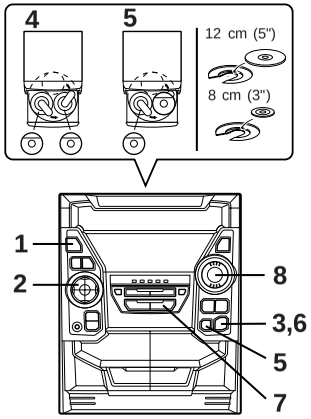
2 Connect the speaker system.



3 Connect the AC power lead.

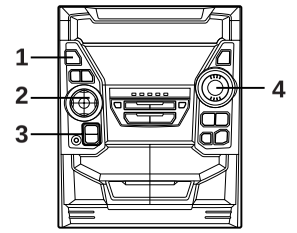


5 Listening to a CD



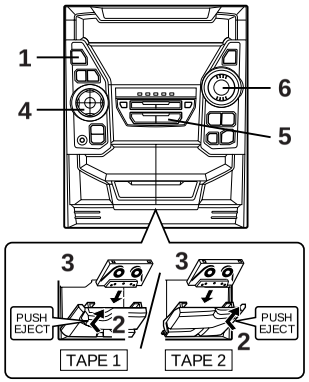
1 Press the ON/STAND-BY button to turn the power on.
2 Press the CD button.
3 Press the OPEN/CLOSE button to open the disc tray.
4 Place the CD(s) on the disc tray, label side up.
5 When loading a third disc, press the DISC SKIP button to turn the disc tray, then place the CD in the open position.
6 Press the OPEN/CLOSE button to close the disc tray.
7 Press the ▶/II button.
8 Adjust the sound volume using the VOLUME buttons.

6 Listening to the radio



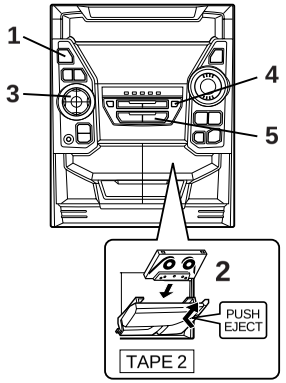
1 Press the ON/STAND-BY button to turn the power on.
2 Press the TUNER (BAND) button to select FM ST, FM or AM.
3 Press the TUNING/TIME (∨ or ∧) button to tune into the desired station.
4 Adjust the sound volume using the VOLUME buttons.

7 Listening to a tape



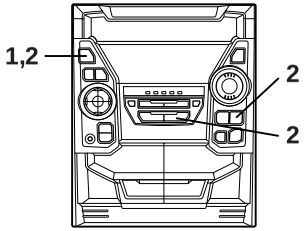
1 Press the ON/STAND-BY button to turn the power on.
2 Open the cassette door by pushing the area marked "PUSH EJECT".
3 Load the cassette into the TAPE 1 or TAPE 2 cassette compartment.
● And then, close the cassette door completely until it is locked.
4 Press the TAPE (1 ⇄ 2) button to select the TAPE 1 or TAPE 2.
5 Press the ▶/II button to start playback.
6 Adjust the sound volume using the VOLUME buttons.

8 Recording from CDs



1 Press the ON/STAND-BY button to turn the power on.
2 Load a cassette into the TAPE 2 cassette compartment.
3 Press the CD button and load the desired disc.
4 Press the REC PAUSE button.
5 Press the ▶/II button.

● Resetting the microcomputer



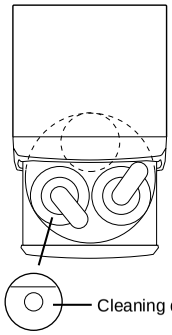
If this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction or the display may not function correctly. If such a problem occurs, do the following:

1 Press the ON/STAND-BY button to enter the stand-by mode.
2 Whilst pressing down the ▶/II button and the X-BASS/DEMO button, hold down the ON/STAND-BY button for at least 1 second.
● "CLEAR AL" will appear.

Caution:
● The operation explained above will erase all data stored in memory including clock and timer settings, and tuner and CD presets.

● CD pickup cleaning

Clean the dust or stain on the CD pickup lens using a commercial cleaning disc (brush type).



DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take suffcient care on static electricity of integrated circuits and other circuits when servicing.

CD-BA160H/1700H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x4	9-1
2	Side Panel (Left/right)	1. Screw ..... (B1) x4 2. Screw ..... (B2) x4	9-1
3	CD Player Unit/ CD Tray Cover	1. Turn on the power supply, open the disc tray, take out the CD cover, and close. (Note 1) 2. Screw ..... (C1) x1 3. Hook ..... (C2) x3 4. Hook ..... (C3) x2 5. Socket ..... (C4) x2 6. Socket ..... (C5) x1 (CD-BA1700H Only)	9-2
4	Rear Panel	1. Screw ..... (D1) x5	9-2
	Digital Output PWB (CD-BA 1700H Only)	2. Screw ..... (D2) x1	9-2
5	RDS PWB	1. Socket ..... (E1) x1	9-3
6	Main PWB	1. Socket ..... (F1) x4 2. Flat Wire ..... (F2) x1 3. Flat Cable ..... (F3) x1 4. Lug Wire ..... (F4) x1 5. Screw ..... (F5) x3 6. Screw ..... (F6) x2	9-3
7	Power PWB	1. Socket ..... (G1) x1 2. Screw ..... (G2) x1 3. Screw ..... (G3) x1	9-3
8	Front Panel	1. Screw ..... (H1) x2 2. Hook ..... (H2) x2	9-3
9	Display PWB	1. Screw ..... (J1) x15 2. Flat Cable ..... (J2) x1	10-1
10	Tape Mechanism	1. Open the cassette holder. 2. Screw..... (K1) x6	10-1
11	Headphones PWB	1. Screw ..... (L1) x1	10-1
12	Turntable	1. Hook ..... (M1) x2 2. Cover ..... (M2) x1	10-2
13	Disc Tray	1. Turn fully the lock lever in the arrow direction. 2. While holding the lock lever,rotate the cam gear until the cam gear rib engages with the clamp lever. 3. Push the slide holder backward to engage the claw with the groove and remove it in the direction of the arrow. ..... (N1) x6	10-3 10-3 10-4
14	CD Servo PWB (Note 2)	1. Screw ..... (P1) x1 2. Hook ..... (P2) x3 3. Socket ..... (P3) x4	10-5
15	CD Mechanism	1. Hook ..... (Q1) x2 2. Hook ..... (Q2) x3	10-6

CD-BA160H/1700H

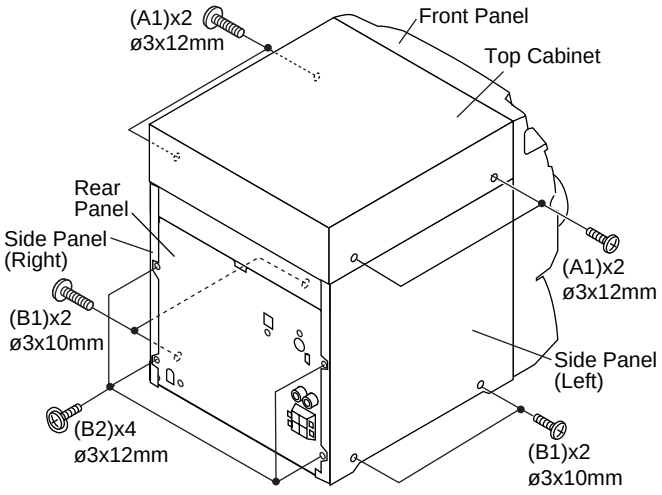


Figure 9-1

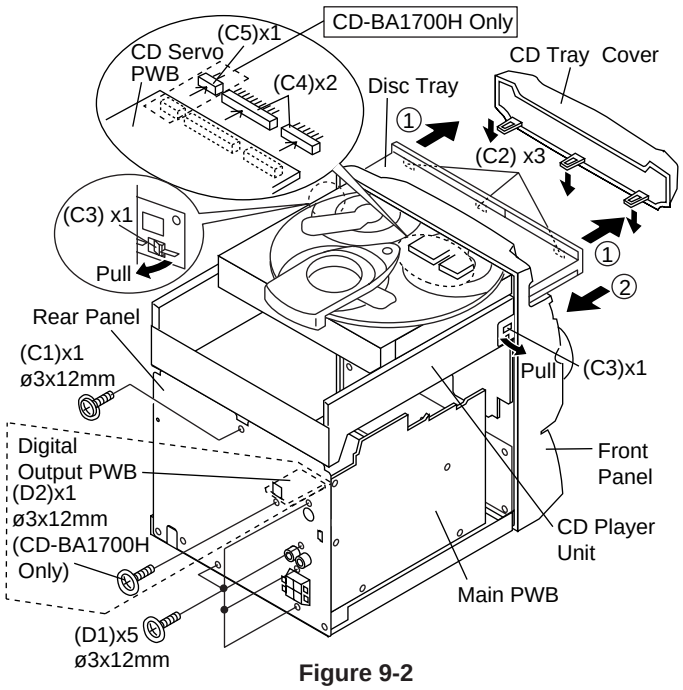


Figure 9-2

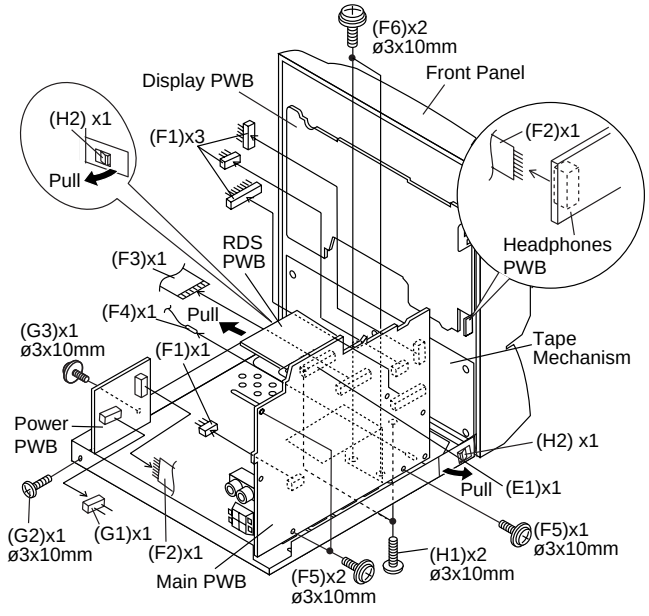


Figure 9-3

CD-BA160H/1700H

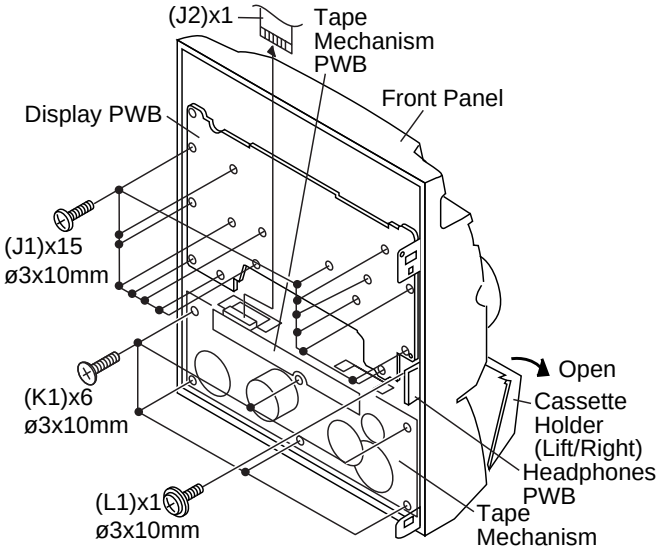


Figure 10-1

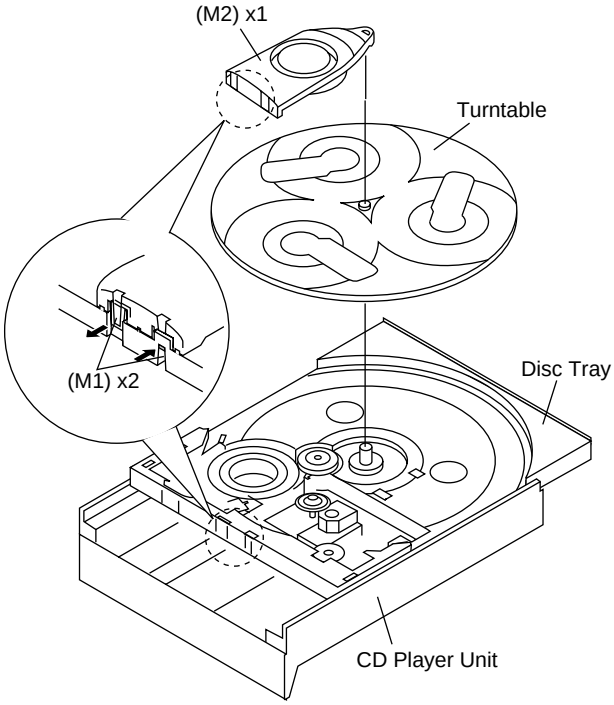


Figure 10-2

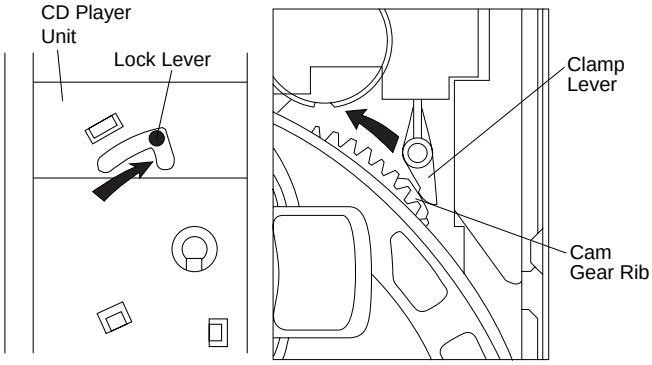


Figure 10-3

Note 3:
1. Be careful not to break the claw of the CD mechanism.
2. When fining back the cam gear assembly, let it lock by front movement.

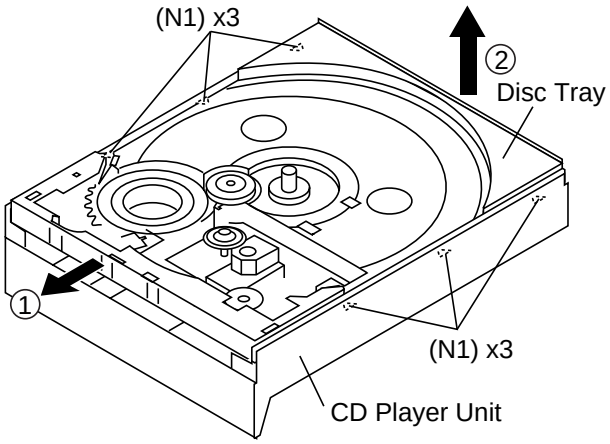


Figure 10-4

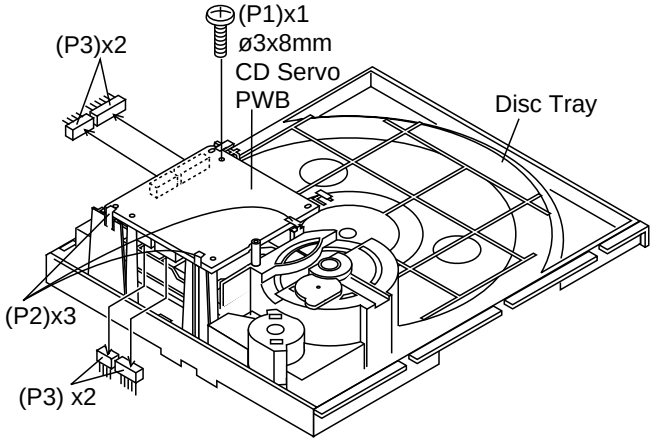


Figure 10-5

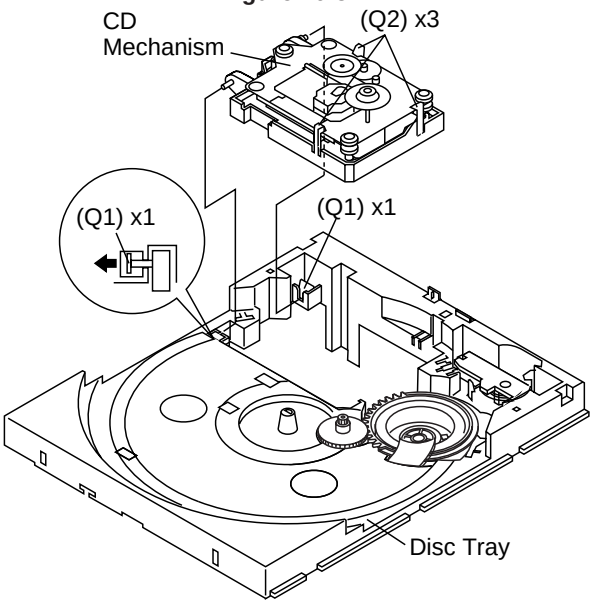


Figure 10-6

Note 1:
How to open the changer manually. (Fig. 10-3)
1. In this state, turn fully the lock lever in the arrow direction through the hole on the loading chassis bottom.
2. While holding the lock lever, rotate the cam gear anticlockwise until the cam gear rib engages with the clamp lever.
3. After that, push forward the CD slide holder.

Note 2:
1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electrostatic damage.

CP-BA160H/1700H (Front Speaker)

STEP	REMOVAL	PROCEDURE	FIGURE
1	Woofer/ Sub Woofer	1. Front Panel ..... (A1) x1 2. Screw ..... (A2) x8	11-1 11-2
2	Tweeter	1. Screw ..... (B1) x2	11-2

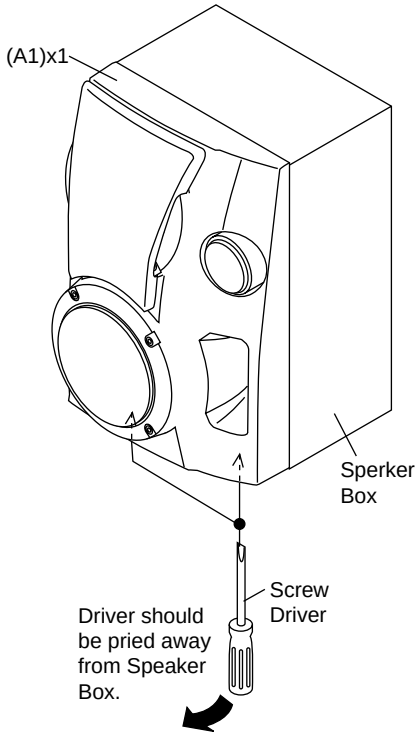


Figure 11-1

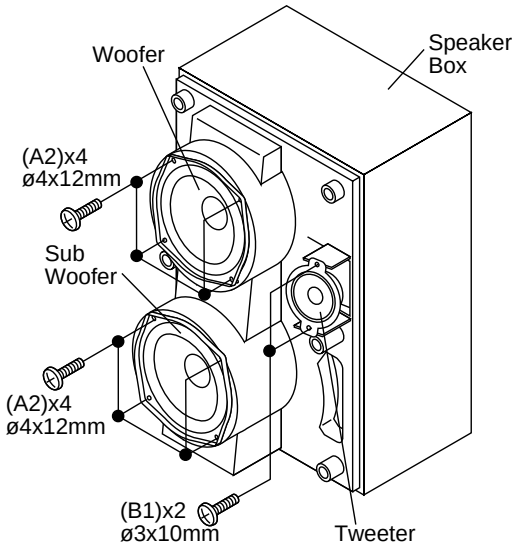


Figure 11-2

GBOXS0041AWM1 (Surround Speaker) CD-BA1700H Only

STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Screw ..... (C1) x6	11-3

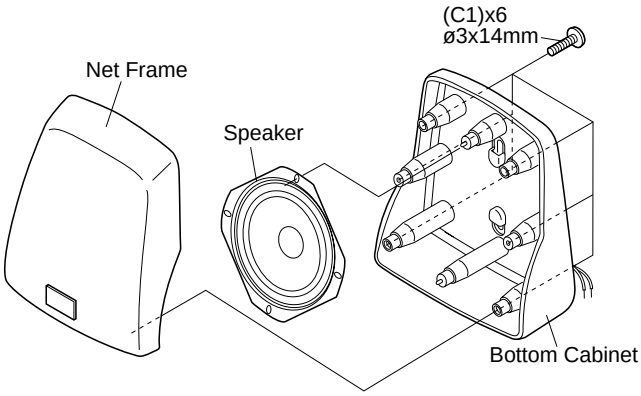


Figure 11-3

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 8 and 10 of the disassembly method to remove the tape mechanism.

How to remove the record/playback and erase heads (Tape 2) (See Fig. 12-1)

1. Carefully remove the record/playback head and erase head screws (A1) x 2 pcs.

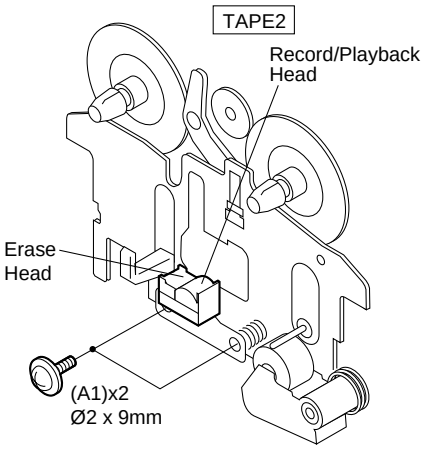


Figure 12-1

How to remove the playback head (Tape 1) (See Fig. 12-2)

1. Carefully remove the playback head screws (B1) x 2 pcs.

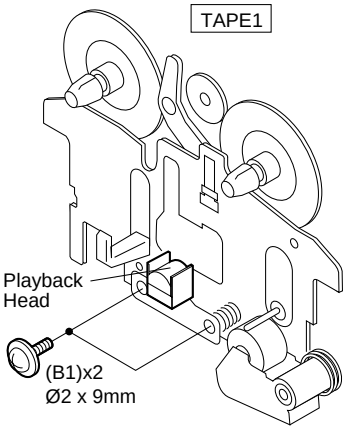


Figure 12-2

How to remove the pinch roller (Tape1/2) (See Fig. 12-3)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (C1) x1 pc., in the direction of the arrow **<B>**.

Note:
When installing the pinch roller, pay attention to the spring mounting position.

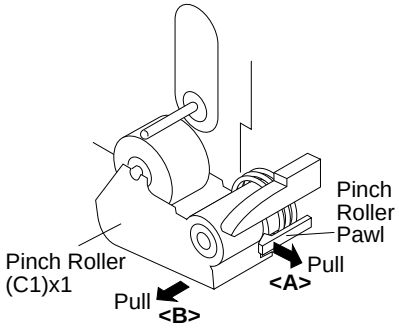


Figure 12-3

How to remove the belt (Tape 1/2) (See Fig. 12-4)

1. Remove the motor.
2. Remove the main belt (D1) x 1 pc., from the motor side.
3. Remove the FF/REW belt (D2) x 1 pc.
4. Remove the main belt (E1) x 1 pc., from the motor side.
5. Remove the FF/REW belt (E2) x 1 pc.

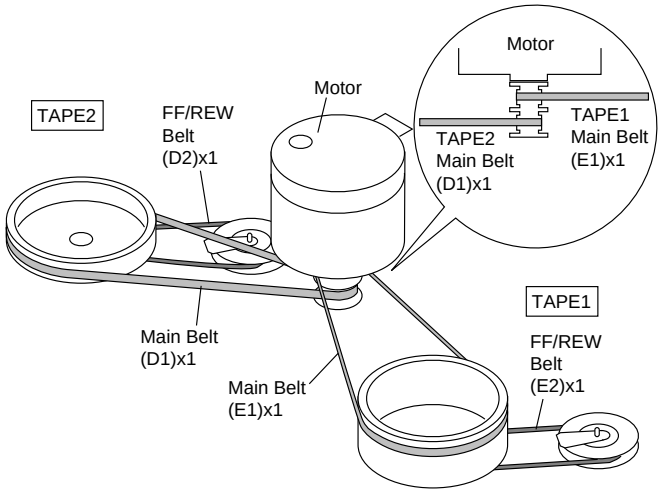


Figure 12-4

How to remove the motor (See Fig. 13-1)

1. Remove the belt.
2. Remove the screws (F1) x 2 pcs., to remove the motor.

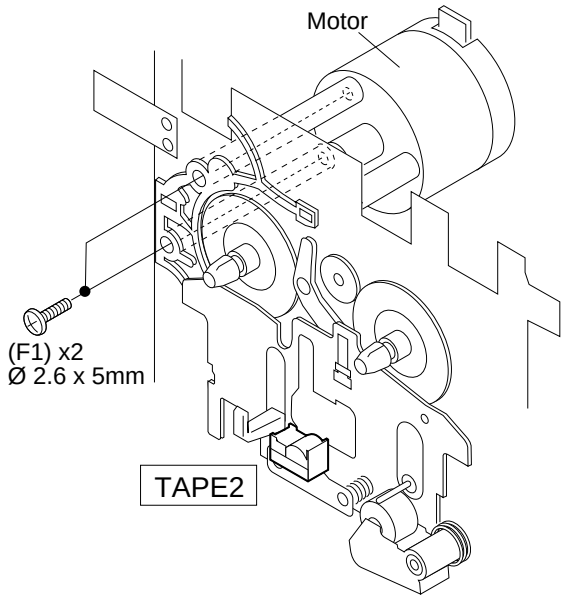


Figure 13-1

CD MECHANISM SECTION

Perform steps 1, 2, 3, 12, 13, 14 and 15 of the disassembly method to remove the CD mechanism.

How to remove the loading motor (See Fig. 13-2)

1. Remove the belt (A1) x 1 pc., from the motor side.
2. Bend the hooks (A2) x 5 pcs., to remove the loading motor.

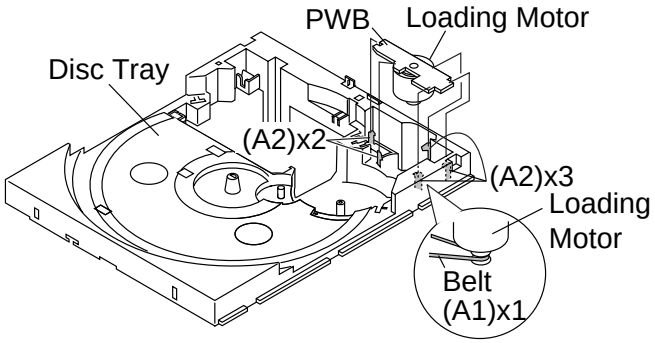


Figure 13-2

How to remove the pickup (See Fig. 13-3)

1. Remove the screws (B1) x 2 pcs., to remove the shaft (B2) x1pc.
2. Remove the stop washer (B3) x 1 pc., to remove the gear (B4) x 1pc.
3. Remove the pickup.

Note

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

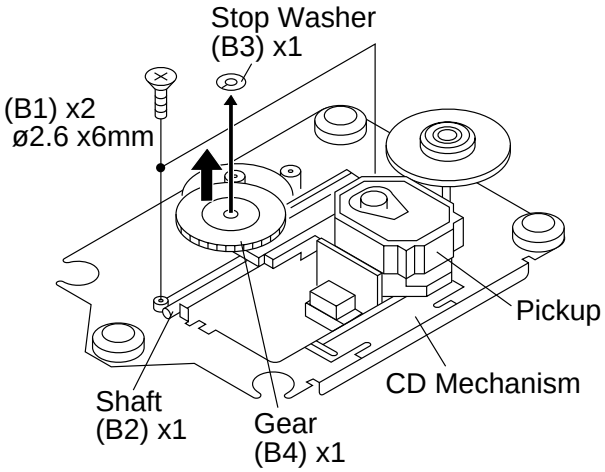


Figure 13-3

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2111	Tape 1: Over 80 g Tape 2: Over 80 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 80 g. cm	30 to 80 g.cm
Fast forward: TW-2231	—	70 to 180 g.cm
Rewind: TW-2231	—	70 to 180 g.cm

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker terminal (Load resistance: 6 ohms)

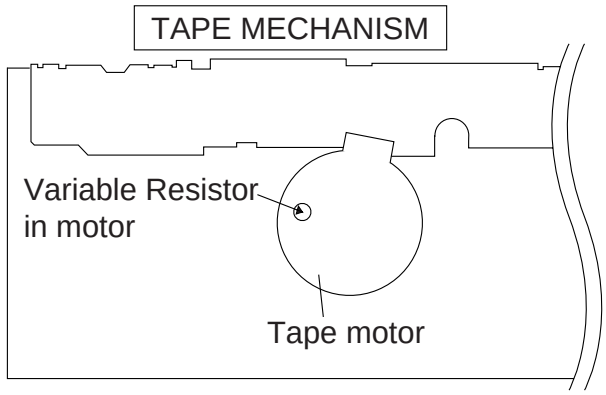


Figure 14-1

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,620 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T303	*1

*1. Input: Antenna, Output: TP302
*2. Input: Antenna, Output: TP301

• FM

Notes:

1: Description of the "FM IF Adjustment" is not carried on this Manual. It is because the IF coil in the FM front end section has been best adjusted in the factory so that its further adjustment is not needed at the field. When replacing the FM front end assembly, no adjustment is needed either.
2: The parts in the FM front end section are prepared in a complete unit, so you can't obtain each part individually

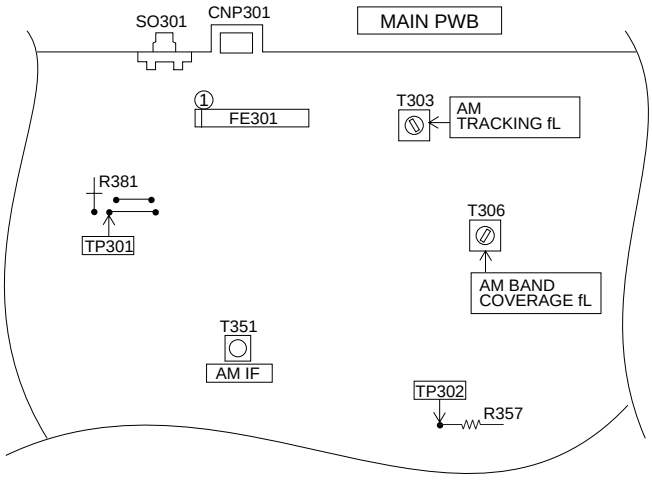


Figure 14-2 ADJUSTMENT POINT

CD SECTION

• **Adjustment**

Since this CD system incorporates the following automatic adjustment functions, readjustment is not needed when replacing the pickup. Therefore, different PWBs and pickups can be combined freely.

Each time a disc is changed, these adjustments are performed automatically. Therefore, playback of each disc can be performed under optimum conditions.

Items adjusted automatically

(1) Offset adjustment (The offset voltage between the head amplifier output and the VREF reference voltage is compensated inside the IC.)
  * Focus offset adjustment
  * Tracking offset adjustment

(2) Tracking balance adjustment (waveform drawing 15-1 EFBL)

(3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0dB.)
  * Focus gain adjustment
  * Tracking gain adjustment

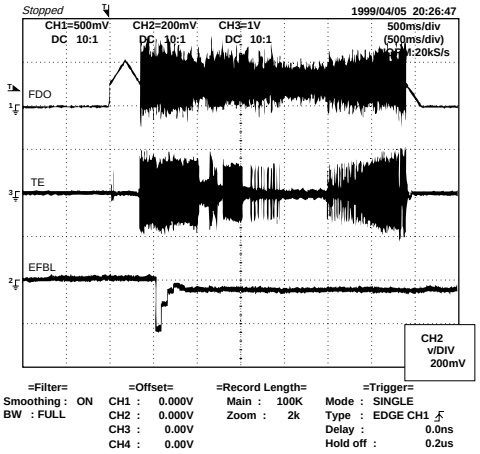

Stopped
1999/04/05 20:26:47
CH1=500mV DC 10:1
CH2=200mV DC 10:1
CH3=1V DC 10:1
500ms/div (500ms/div)
FDO
TE
EFBL
CH2 v/DIV 200mV
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.000V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2k
=Trigger= Mode : SINGLE Type : EDGE CH1 Delay : 0.0ns Hold off : 0.2us

Figure 15-1

CD ERROR CODE DESCRIPTION

Error	State Code
	[Servo System Error]
0001	Cannot detect Pickup-in SW
0002	DSP access error
	[Error during close operation]
0101	Open/Close SW Low → High not functioning
0103	Open/Close SW High → Low not functioning
	[Error during open operation]
0201	Open/Close SW Low → High not functioning
0203	Open/Close SW High → Low not functioning
	[Error during skip operation]
0302	Pickup-in SW is not detected
0306	During Disc 1 search, Open/Close SW or Clamp SW or Disc SW do not change to low.
0307	Clamp SW Low → High not functioning
0308	Clamp SW High → Low not functioning

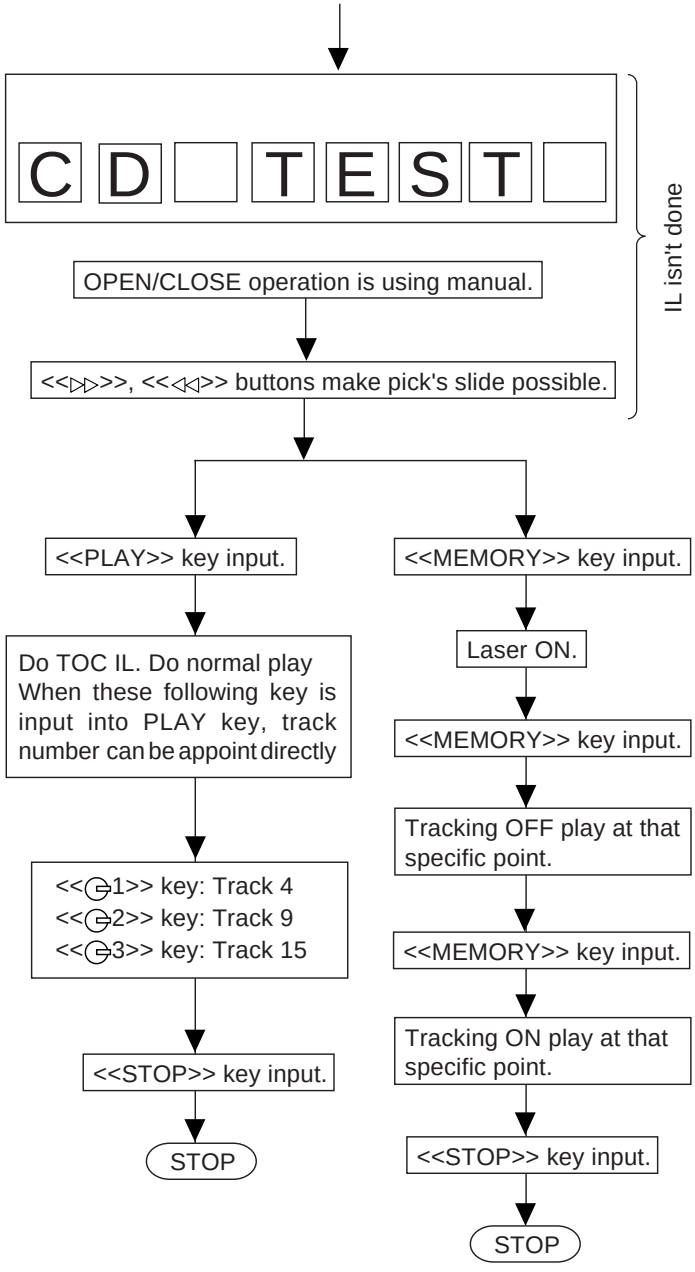
TEST MODE

• **Setting the test mode**

Any one of test mode can be set by pressing several keys as fallows.

<X-BASS> + <CD> + <POWER> TEST:CD operation test

Function:-CD test mode.
-Enter test mode.


C D T E S T
IL isn't done
OPEN/CLOSE operation is using manual.
<<▷▷>>, <<◁◁>> buttons make pick's slide possible.
<<PLAY>> key input.
Do TOC IL. Do normal play
When these following key is input into PLAY key, track number can be appoint directly
<<1>> key: Track 4
<<2>> key: Track 9
<<3>> key: Track 15
<<STOP>> key input.
STOP
<<MEMORY>> key input.
Laser ON.
<<MEMORY>> key input.
Tracking OFF play at that specific point.
<<MEMORY>> key input.
Tracking ON play at that specific point.
<<STOP>> key input.
STOP

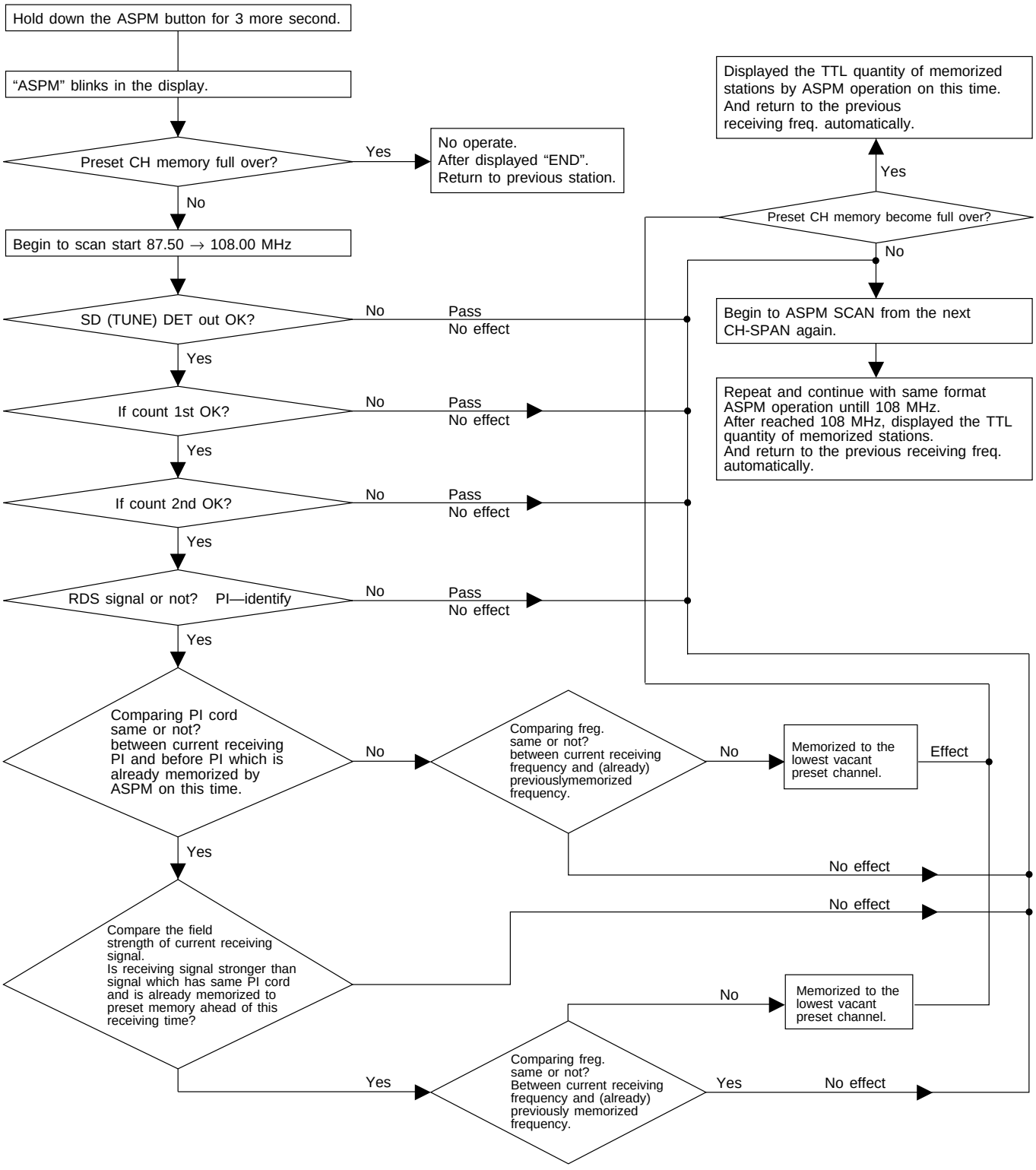
VOL — Last memory
BAL — CENTER
P.GEQ — FLAT
X-BASS — OFF

To cancel : Power OFF

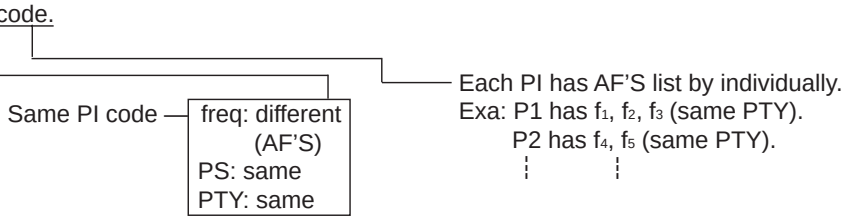
Sliding the PICKUP with <<▷▷>>, <<◁◁>> button must only be in STOP mode.

CD-BA160H/1700H

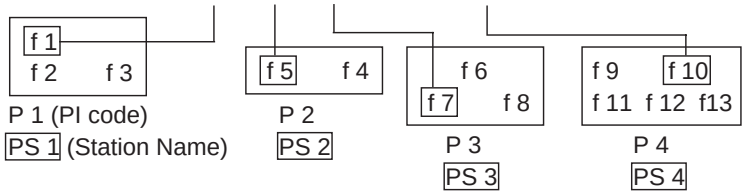
ASPM, summary operation


Hold down the ASPM button for 3 more second.
"ASPM" blinks in the display.
Preset CH memory full over?
Yes
No operate.
After displayed "END".
Return to previous station.
No
Begin to scan start 87.50 → 108.00 MHz
SD (TUNE) DET out OK?
No
Pass
No effect
Yes
If count 1st OK?
No
Pass
No effect
Yes
If count 2nd OK?
No
Pass
No effect
Yes
RDS signal or not? PI—identify
No
Pass
No effect
Yes
Comparing PI cord same or not? between current receiving PI and before PI which is already memorized by ASPM on this time.
No
Comparing freg. same or not? between current receiving frequency and (already) previouslymemorized frequency.
No
Memorized to the lowest vacant preset channel.
Effect
No effect
Yes
Compare the field strength of current receiving signal. Is receiving signal stronger than signal which has same PI cord and is already memorized to preset memory ahead of this receiving time?
No effect
No
Memorized to the lowest vacant preset channel.
Yes
Comparing freg. same or not? Between current receiving frequency and (already) previously memorized frequency.
Yes
Yes
No effect
Displayed the TTL quantity of memorized stations by ASPM operation on this time. And return to the previous receiving freq. automatically.
Yes
Preset CH memory become full over?
No
Begin to ASPM SCAN from the next CH-SPAN again.
Repeat and continue with same format ASPM operation untill 108 MHz. After reached 108 MHz, displayed the TTL quantity of memorized stations. And return to the previous receiving freq. automatically.

• ASPM SCAN: 87.50MHz → 108.00 MHz.
• Only RDS signal is memorized by ASPM because RDS signal has PI code and is suitable and convenient for ASPM operation.
ASPM
Comparing field strength, only one strongest RDS station is memorized of all stations (repeater relay stations) that have same PI code.



[For example] Pickup and memorized to preset CH.



Select signals (f1, f5, f7, f10) are memorized in the preset memory by ASPM.
• If tentative - ASPM operation is repeated intentionally, never memorized (over write) at the same frequecy.
1st time ASPM → strongest stations of each PI are memorized.

ASPM is not only very usefull for PTY search, but also EON operation.
2nd time ASPM → 2nd strong stations of each PI are memorized and so on.
PTY search function is equal to FM band search function as a result.

1. Introduction of RDS for CD-BA160H/1700H.
CD-BA160H/1700H RDS function is equal to adding EON feature to the current CD-C75H RDS.
EON feature is EON—PTY and EON—TI.
Although PTY and TI indicators are separated, PTY contains TI in the PTY items (software) like current PTY search items.

EON—PTY and EON—TI are basically stand-by → receive the desired program of ON station.

2. The difference point from current CD-C75H RDS. (CD-C75H — CD-BA160H/1700H)
1. PTY item: added TA. (TTL 18 kind.)
2. Each "TP", "TA" ind. light up or go out individually.
"TA" ind. doesn't light up on current model, CD-C75H due to none EON—TI.
3. Added 3 indicators(in FL) due to adding EON feature.
EON: Lights up only during receiving EON data (14A).
TI: During EON-TI stand-by → Light up
During receiving ON station. → blink.
PTY: During EON-PTY stand-by → Light up
During receiving ON station. → blink.

4. No adjust type (None adjusting circuit.)
5. Added EON button.
6. Need to change RDS logo due to the addition of EON feature.
7. Added EON—TI, EON—PTY function.

3. Summary of CD-BA160H/1700H RDS—EON operation
EON—PTY: Select and set the desired "PTY" → stand-by → switch to ON (other network) Station at the start of desired PTY automatically → stay and listen to PTY of ON station → switch back to TN (This net) station automatically at the end of PTY (ON) i.e. after changing to another PTY (except AFFAIRS) or cancelling to receive PTY of ON station midway.
EON—TI: Select and set the "TI" → stand-by → switch to ON station at the start of traffic announcement automatically → stay and listen to TA of ON station → switch back to TN station automatically at the end of TA (ON).
ie after TA (ON) is over or cancelled to receive TA of ON station midway.
When switching TN → ON station.

In case of exist 2 more stations having the desired (specified) "PTY" or "TI", the receiver will select and switch to ON station comparing field strength at the same time. But when the frequency of ON station exists in the preset-memory, then receiver switches straight to that ON station (CH), without comparing field strength so can make a quick switching from TN—ON station.
Preset memory takes priority of switching TN—ON station.
Therefore ASPM is usefull not only for PTY search but also for rapid EON switching.
Anyway CD-BA160H/1700H EON is basically stand-by and receiving method, along with the Guidelines for EON implementation.

CD-BA160H/1700H

EON summary notice for reference

1. EON-TI/PTY — EON stand-by can be set, only when EON ind. lights up.
   While EON ind. goes out (NO EON STATION), EON stand-by can't be set.
   If the EON button is pressed, then “NO EON” is indication the display.
2. EON-TI/PTY — Even if switch back ON → TN station continue to keep EON stand-by.
3. EON-TI — Don’t switch TN → ON during TN broadcast TA. (same item)
4. EON-TI/PTY — EON can be cancelled during receiving ON station by pressing EON button if necessary and switch back ON→TN.
5. EON-TI/PTY — EON stand-by is perfectly cancelled (cleared) by pressing EON button 2 times during stand-by or power OFF or Tun Up/Down or change band or recall pre-set CH.
6. EON-TI/PTY — After setting EON stand-by, stand-by items can be confirmed by pressing EON button one time.
7. EON-TI/PTY — EON button function:
   - EON setting
   - Confirm stand-by items
   - Cancel (ON→TN)
   - EON clear cancel (2 times)
8. EON-TI/PTY — After setting EON-TI and EON-PTY stand-by, if when EON data is not transmitted, EON ind goes out and EON stand-by is automatically cancelled display “NO EON”.
9. EON-TI — EON-TI stand-by can't be set. When TP=0,TA=0 (TN) even if EON ind. lights up and the EON button is pressed then “NO TI” is indication the display.
10. EON-PTY — Don’t switch TN → ON during TN broadcast same specified PTY. (same item of PTY)
11. EON-TI/PTY — Switch TN→ON → TN station one cycle.
    Never switch TN → ON1 → ON2 → Other net to other net station.
12. EON-TI/PTY — After switch TN → ON station. When ON station is NO RDS, NO signal, TA=OFF or different PTY items. The receiver switch back ON → TN displaying “NO READY”.
13. — During receive ON station. when ON station become to be NO RDS, NO signal, TA=ON to OFF or different PTY item, The receiver switch back ON → TN.
14. EON-TI/PTY — Switch TN → ON in case of 2 more stations exist, comparing field strength and switch to the strongest station, if these signals are same strength, switch to the first previous station.
    If same frequency as AF'Sexists in the preset memory, then switch TN → ON (preset memory station) straight.
    In case of exist 2 more preset memories of AF’S,then switch to the preset CH which taken in EON DATA first, also in this case no concern to field strength.
15. — Even if switch TN → ON preset memory straight, that ON station is very weak signal, then search another AF'S (ON) station comparing field strength and switch to the strongest station as a result. Of all atations of AF'S are very weak or no good condition, then, switch back ON → TN automatically display "NO READY".
16. EON-TI/PTY — No linkage volume, power ON/OFF, and switch function.

Traffic Programme code (TP)	Traffic Announcement code (TA)	Applications
OFF	OFF	This programme does not carry traffic announcements nor does it refer, via EON, to a programme that does.
OFF	ON	This programmecarries EON information about another programme which gives traffic information.
ON	OFF	This programme carries traffic announcements but none are being broadcast at present and may also carry EON information about other traffic announcements.
ON	ON	A traffic announcement is being broadcast on this programme at present.

RDS (Radio Data System) OPERATION

RDS is a broadcasting service which a growing number of FM stations are now providing. It allows these FM stations to send additional signals along with their regular programme signals. For example, the stations send their station names, and information about what type of programme they broadcast, such as sports or music, etc.

When tuned to an FM station which provides the RDS service, the RDS will appear, and the station frequency (and then the station name if sent) will be displayed.
"TP" (Traffic Programme) will appear on the display when the received broadcast carries traffic announcements, and "TA" (Traffic Announcement) will appear whilst a traffic announcement is received.
"EON" will appear whilst the EON (Enhanced Other Networks information) data is broadcast.
"PTYI" (Dynamic PTY Indicator) will appear whilst the Dynamic PTY station is received.

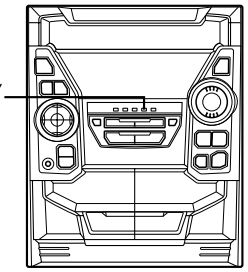
Note:
"TP" and "TA" appear at the same time during an announcement. When only "TA" appears, an announcement is not made.

■ Information Provided by RDS

With the CD-BA1700H, you can display three types of RDS service. To show them in the display, press the DISPLAY MODE button. Each time you press the DISPLAY MODE button, the display will change to show the following information.

→ PS ⟶ PTY ⟶ RT ⟶ Station Frequency →

PS (Programme Service)	Station names commonly known will be displayed. "NO PS" appears if no signal is received.
PTY (Program Type)	Programme type will be displayed. "NO PTY" appears if no signal is received.
RT (Radio Text)	Radio text will be displayed. "NO RT" appears if no signal is received.
Station Frequency	Station frequencies.



Descriptions of the PTY (Programme Type) codes, TP (Traffic Programme) and TA (Traffic Announcement) With the CD-BA1700H, you can search for and receive the following PTY, TP and TA signals.

NEWS: Short accounts of facts, events and publicly expressed views, reportage and actuality.

AFFAIRS: Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.

INFO: Programmes whose purpose is to impart advice in the widest sense.

SPORT: Programme concerned with any aspect of sport.

EDUCATE: Programme intended primarily to educate, of which the formal element is fundamental.

DRAMA: All radio plays and serials.

CULTURE: Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.

SCIENCE: Programmes about the natural sciences and technology.

VARIED: Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.

POP M: Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.

ROCK M: Contemporary modern music, usually written and performed by young musicians.

EASY M: Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialised music styles, Jazz, Folk or Country. Music in this category is often but not always, vocal, and usually of short duration.

LIGHT M: Classical music for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.

CLASSICS: Performances of major orchestral works, symphonies, chamber music, etc., and including Grand Opera.

OTHER M: Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.

WEATHER: Weather reports and forecasts and meteorological information.

(Continued)

FINANCE: Stock Market reports, commerce, trading, etc.

CHILDREN: For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.

SOCIAL: Programmes about people and things that influence them individually or in groups. Includes: sociology, history, geography, psychology and society.

RELIGION: Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.

PHONE IN: Involving members of the public expressing their views either by phone or at a public forum.

TRAVEL: Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used.

LEISURE: Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine, etc.

JAZZ: Polyphonic, syncopated music characterised by improvisation.

COUNTRY: Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.

NATION M: Current Popular Music of the Nation or Region in that country's language, as opposed to International 'Pop' which is usually US or UK inspired and in English.

OLDIES: Music from the so-called "golden age" of popular music.

FOLK M: Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or people.

DOCUMENT: Programme concerned with factual matters, presented in an investigative style.

TEST: Broadcast when testing emergency broadcast equipment or receivers.

ALARM !: Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.

NONE: No programme type (receive only).

TP: Broadcasts which carry traffic announcements.

TA: Traffic announcements are currently on air.

Note:
- When the unit is in the EON stand-by mode and a programme is selected, the unit will display "TI" instead of "TA".

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) indicates AM
     < > indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” (⊏ ═ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW1	OPEN/CLOSE	ON—OFF
SW2	CLAMP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW601	ON/STAND-BY	ON—OFF
SW602	CLOCK	ON—OFF
SW603	TIMER/SLEEP	ON—OFF
SW604	PTY TI/SEARCH	ON—OFF
SW605	EON	ON—OFF
SW606	ASPM	ON—OFF
SW607	DISPLAY MODE	ON—OFF
SW608	STATION	ON—OFF
SW609	DISC SKIP	ON—OFF
SW610	OPEN/CLOSE	ON—OFF
SW611	DIMMER	ON—OFF
SW612	X-BASS	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW613	EQUALIZER	ON—OFF
SW614	VOLUME UP	ON—OFF
SW615	VOLUME DOWN	ON—OFF
SW616	CD	ON—OFF
SW617	TAPE	ON—OFF
SW618	TUNING DOWN	ON—OFF
SW619	MEMORY SET	ON—OFF
SW620	REVIEW	ON—OFF
SW621	FAST FORWARD	ON—OFF
SW622	PLAY/REPEAT	ON—OFF
SW623	STOP	ON—OFF
SW625	RECORD/PAUSE	ON—OFF
SW626	TUNING UP	ON—OFF
SW627	VIDEO/AUX	ON—OFF
SW628	TUNER (BAND)	ON—OFF

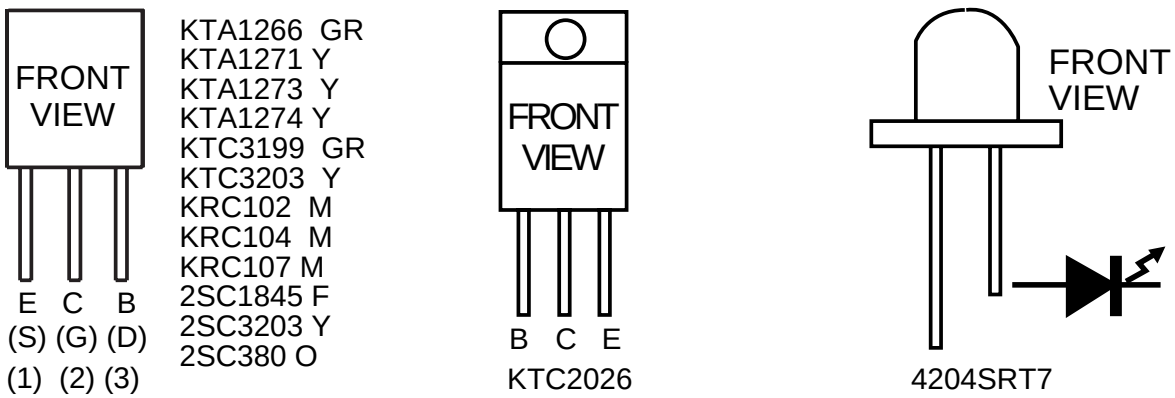


Figure 20 TYPES OF TRANSISTOR AND LED

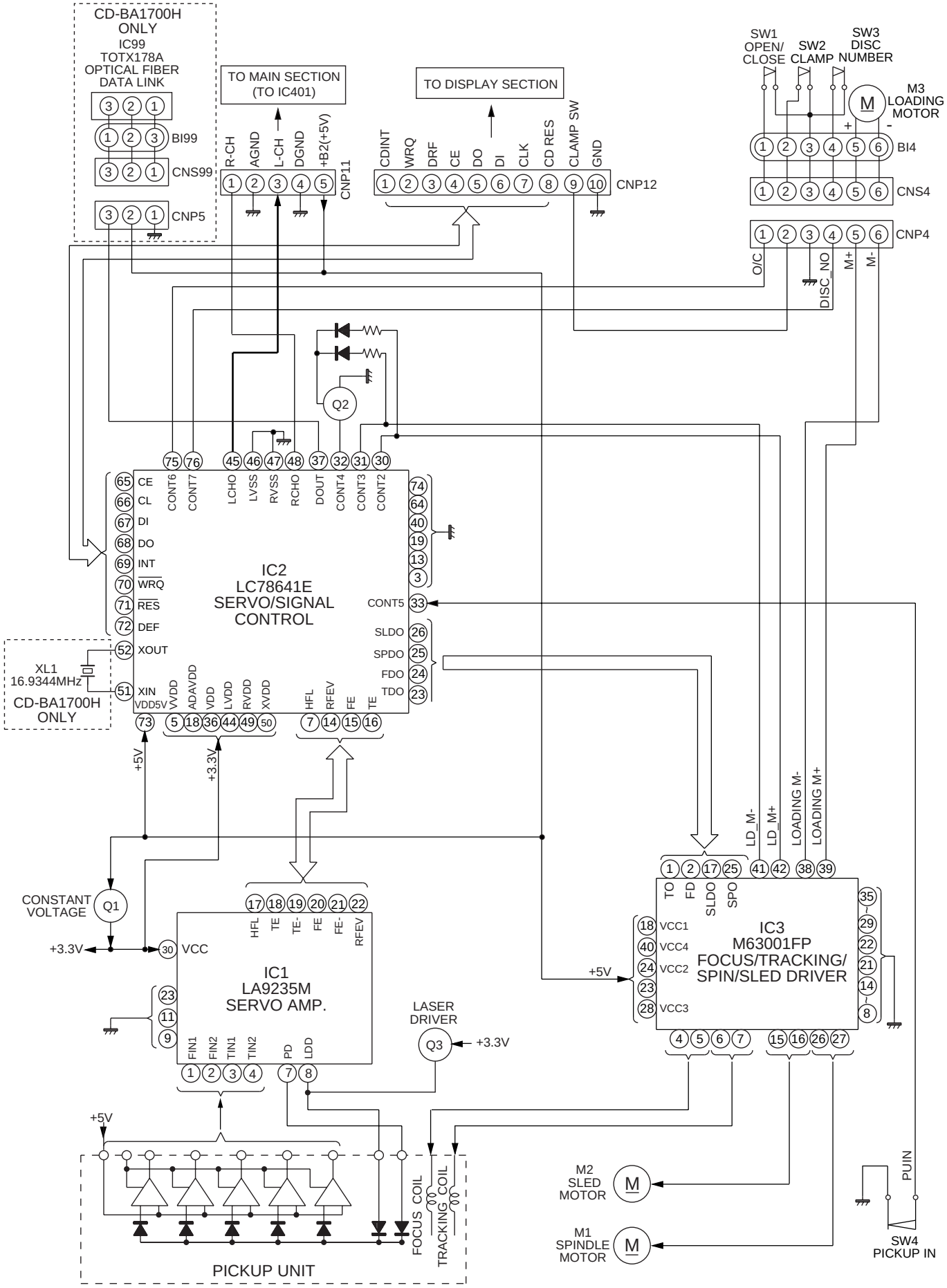


Figure 21 BLOCK DIAGRAM (1/3)

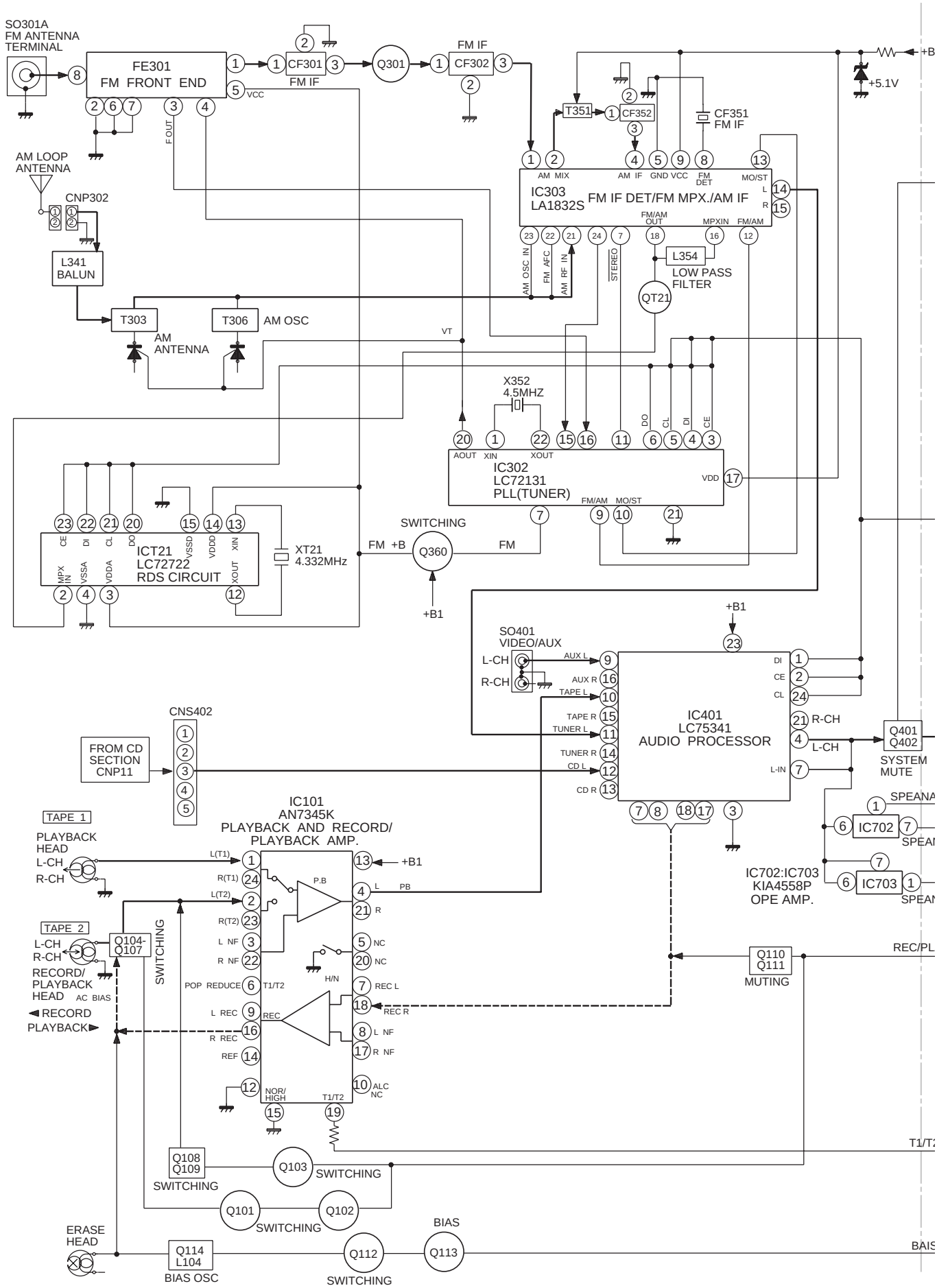


Figure 22 BLOCK DIAGRAM (2/3)

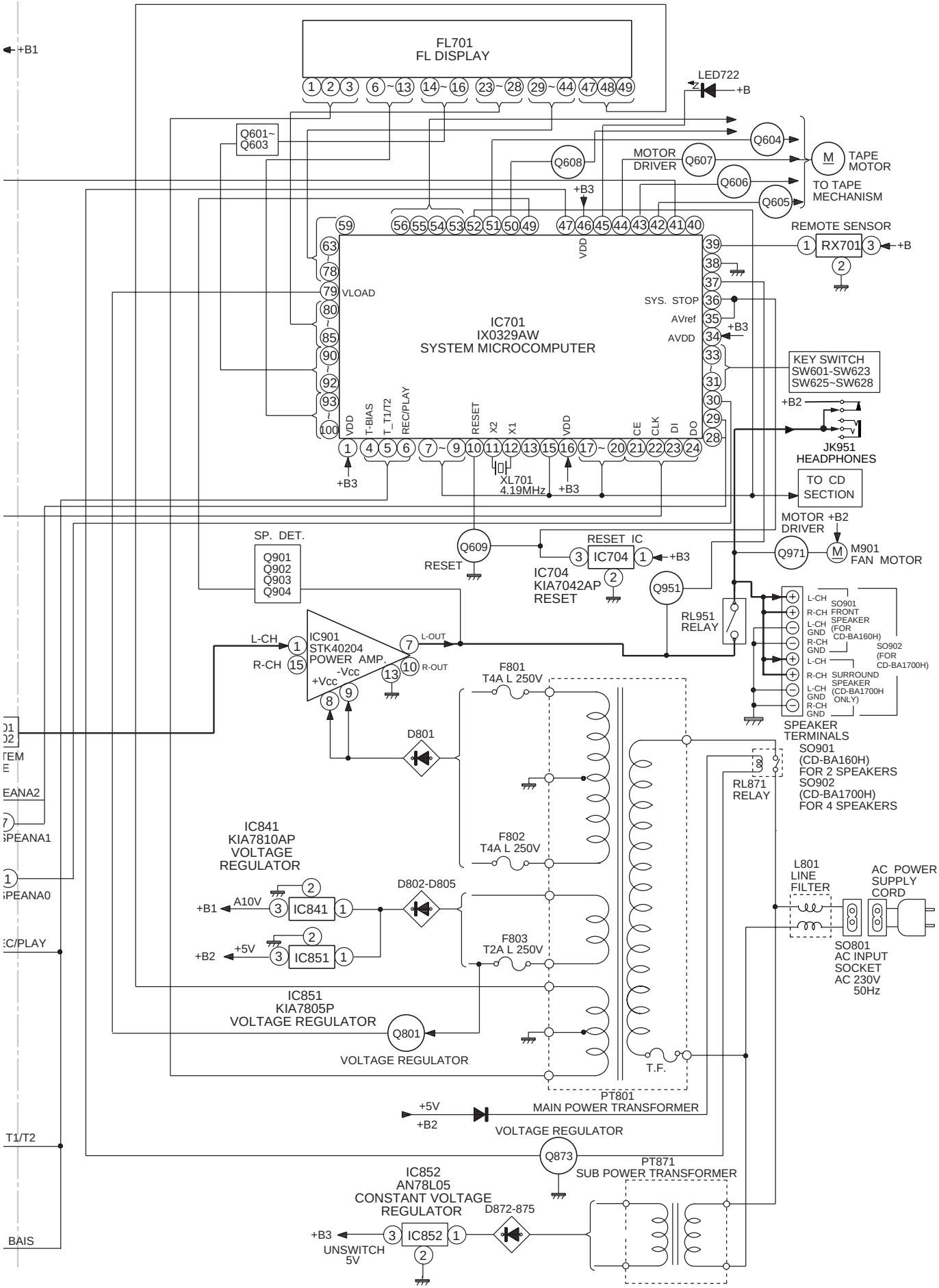
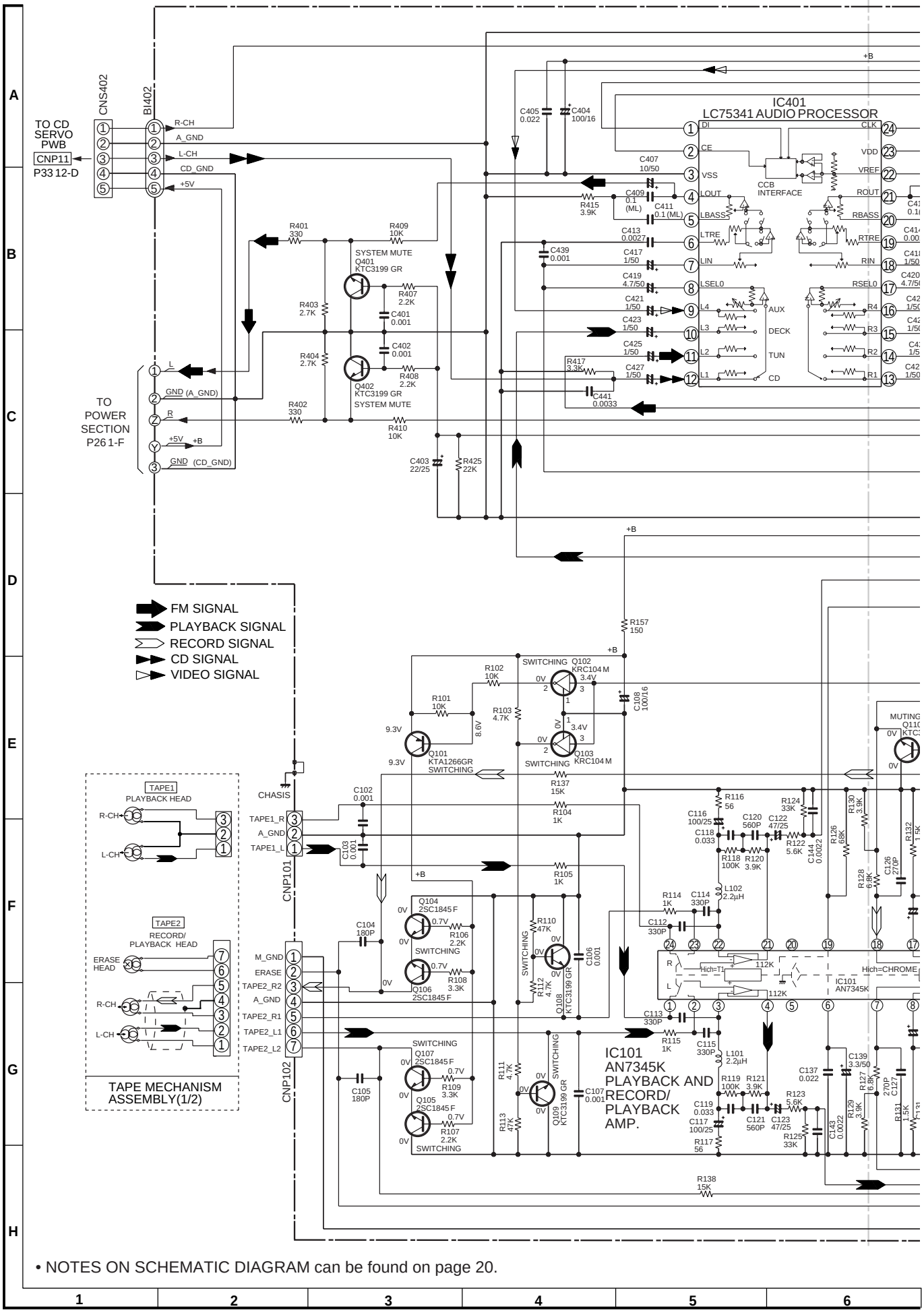
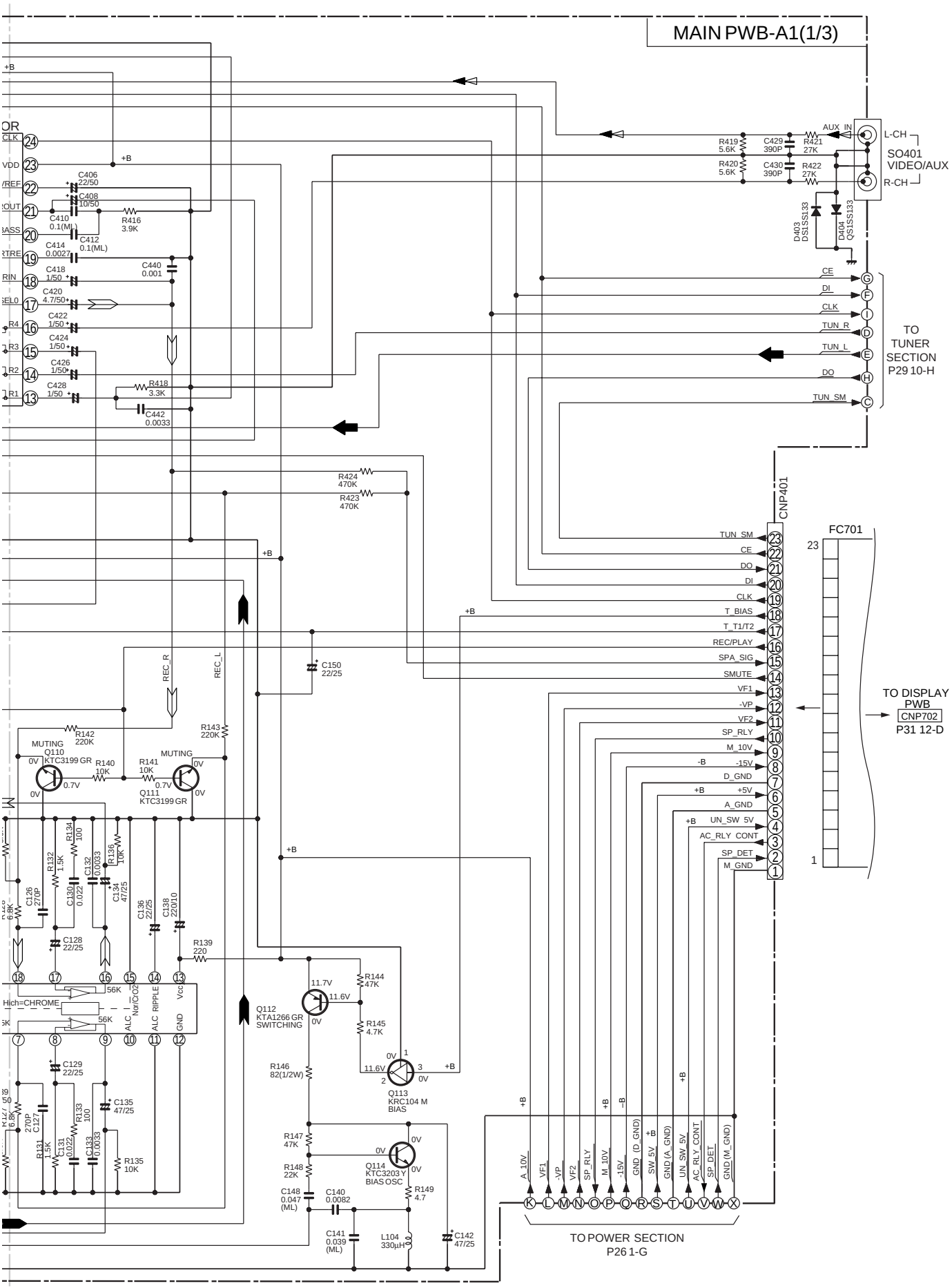


Figure 23 BLOCK DIAGRAM (3/3)



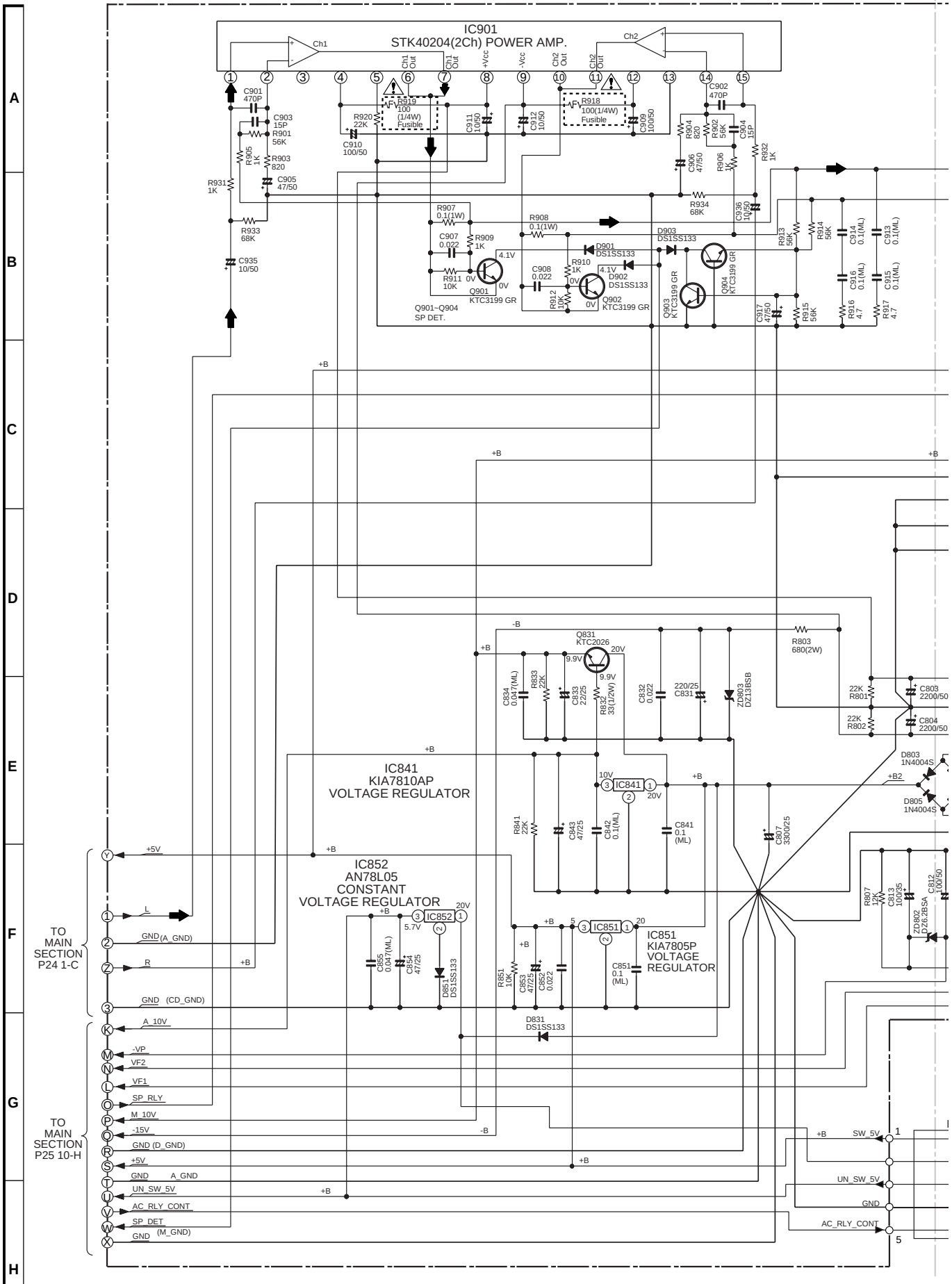
• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 24 SCHEMATIC DIAGRAM (1/10)



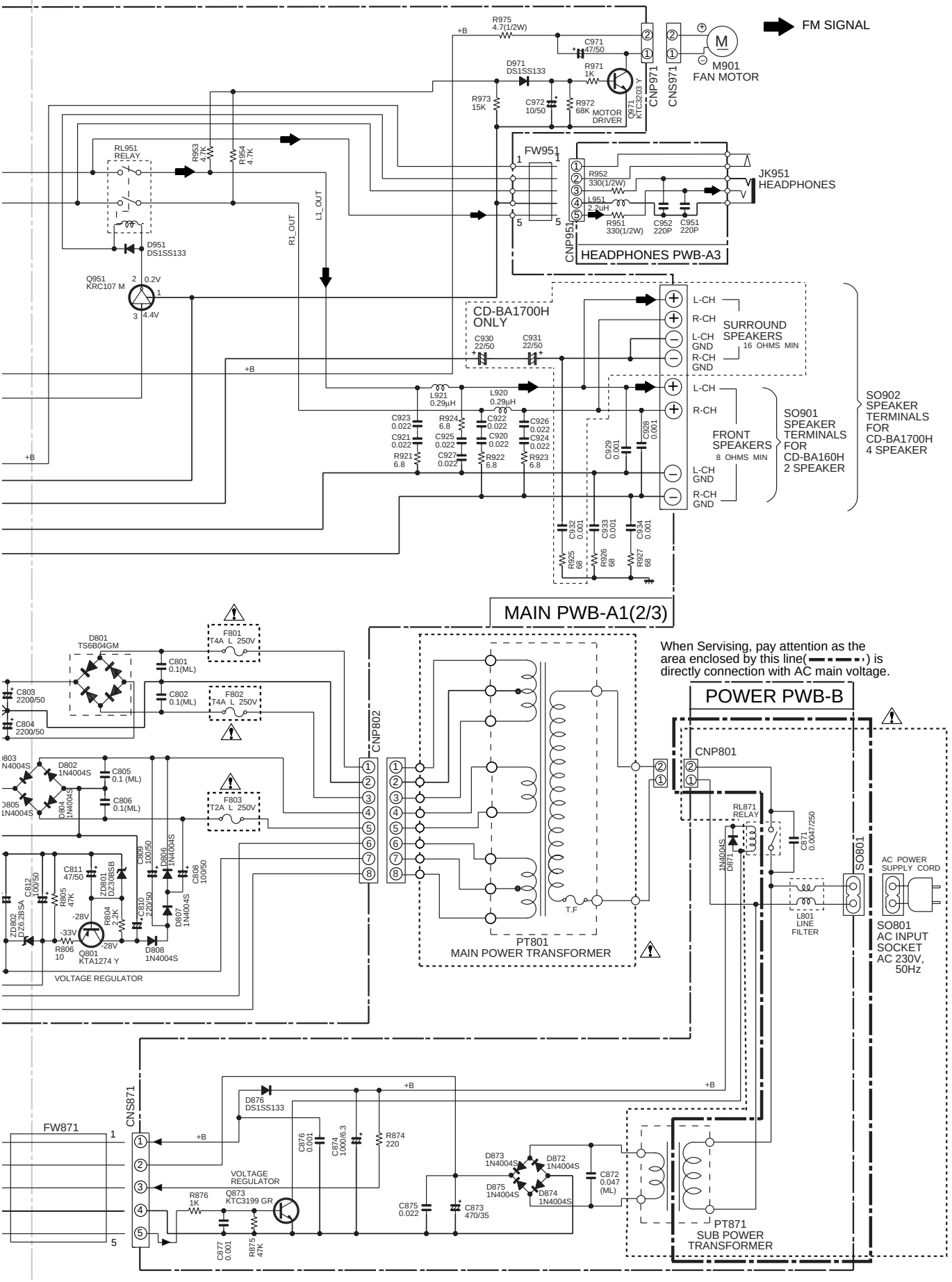
7	8	9	10	11	12

Figure 25 SCHEMATIC DIAGRAM (2/10)



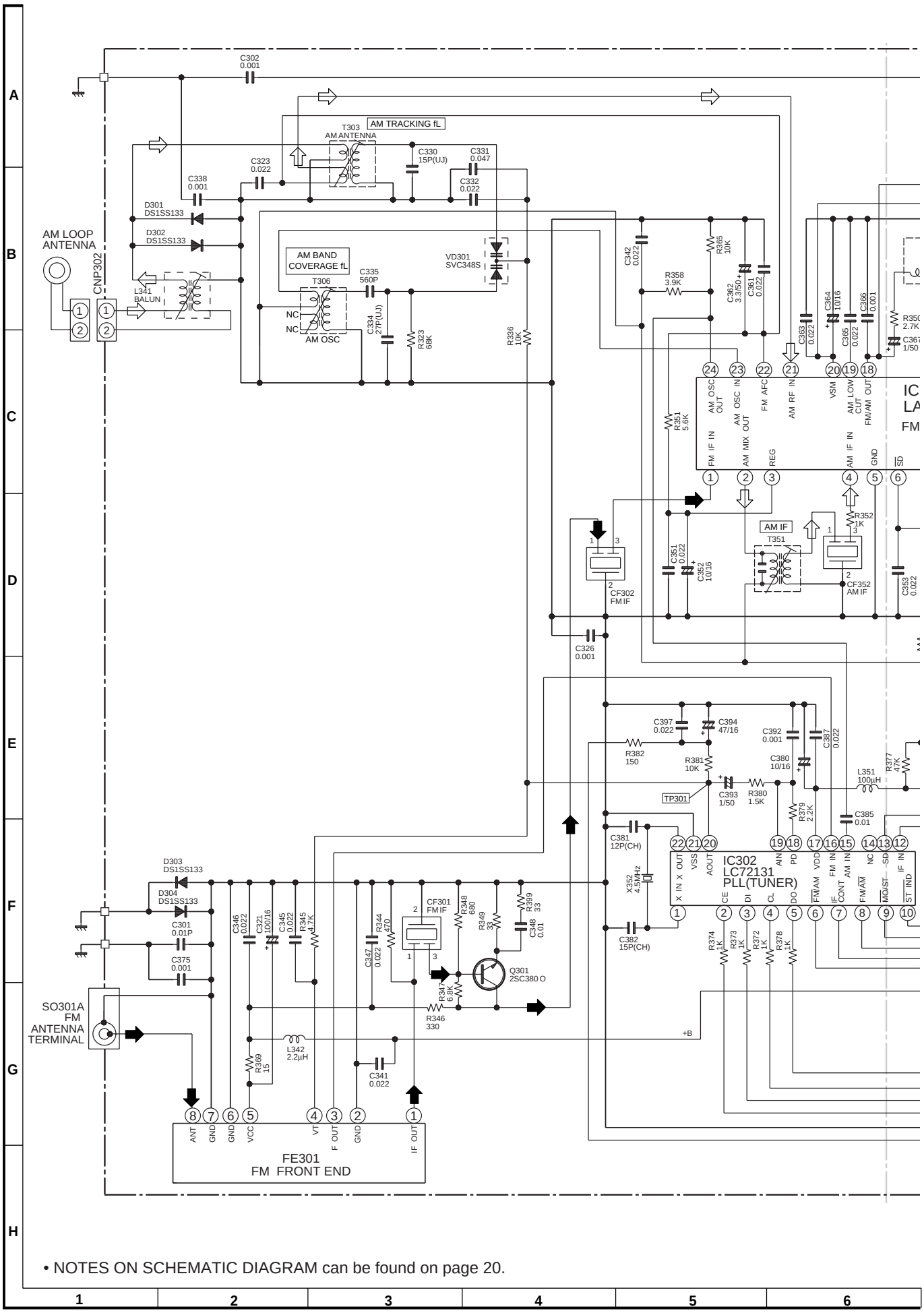
• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 26 SCHEMATIC DIAGRAM (3/10)



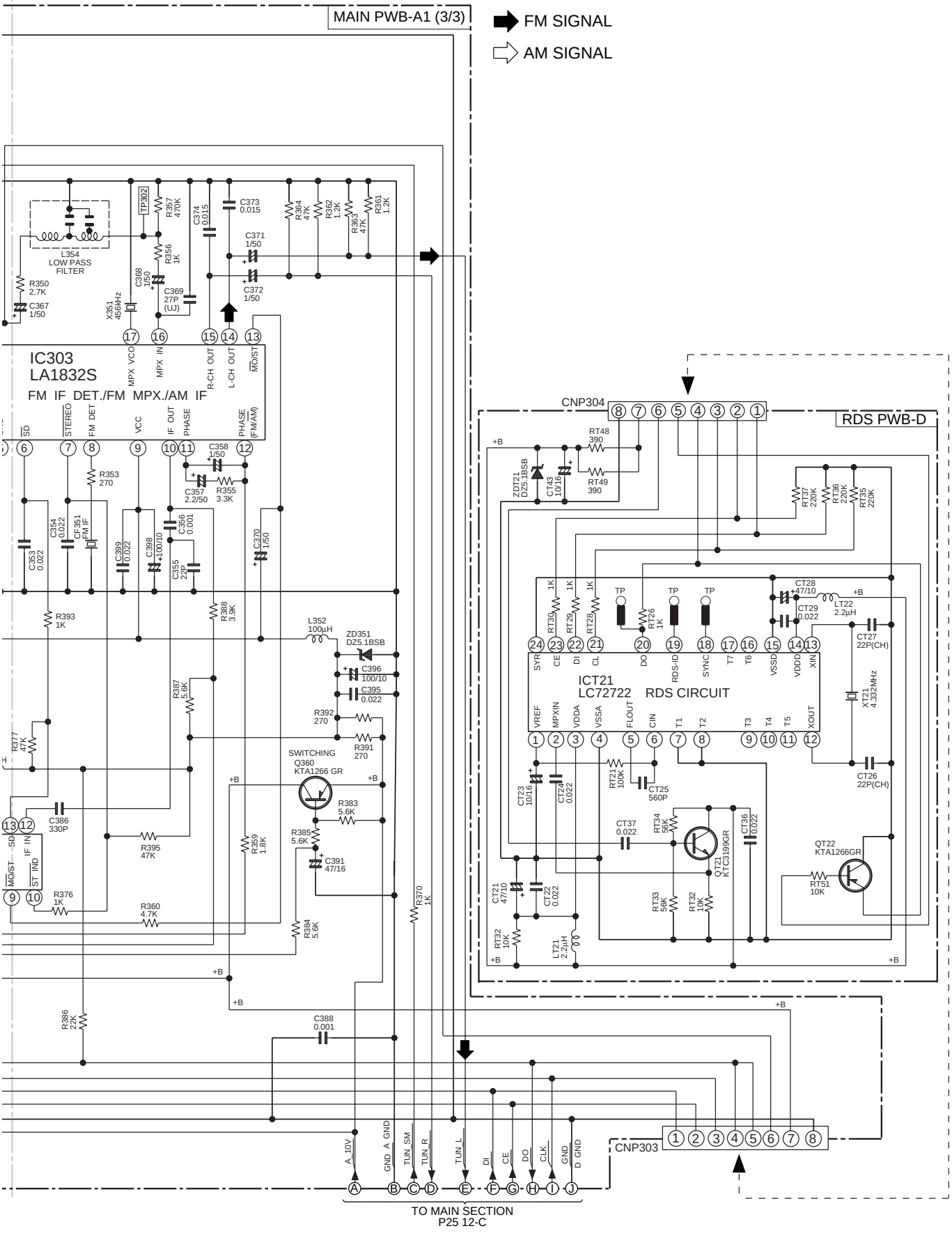
7	8	9	10	11	12

Figure 27 SCHEMATIC DIAGRAM (4/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 28 SCHEMATIC DIAGRAM (5/10)



7	8	9	10	11	12

Figure 29 SCHEMATIC DIAGRAM (6/10)

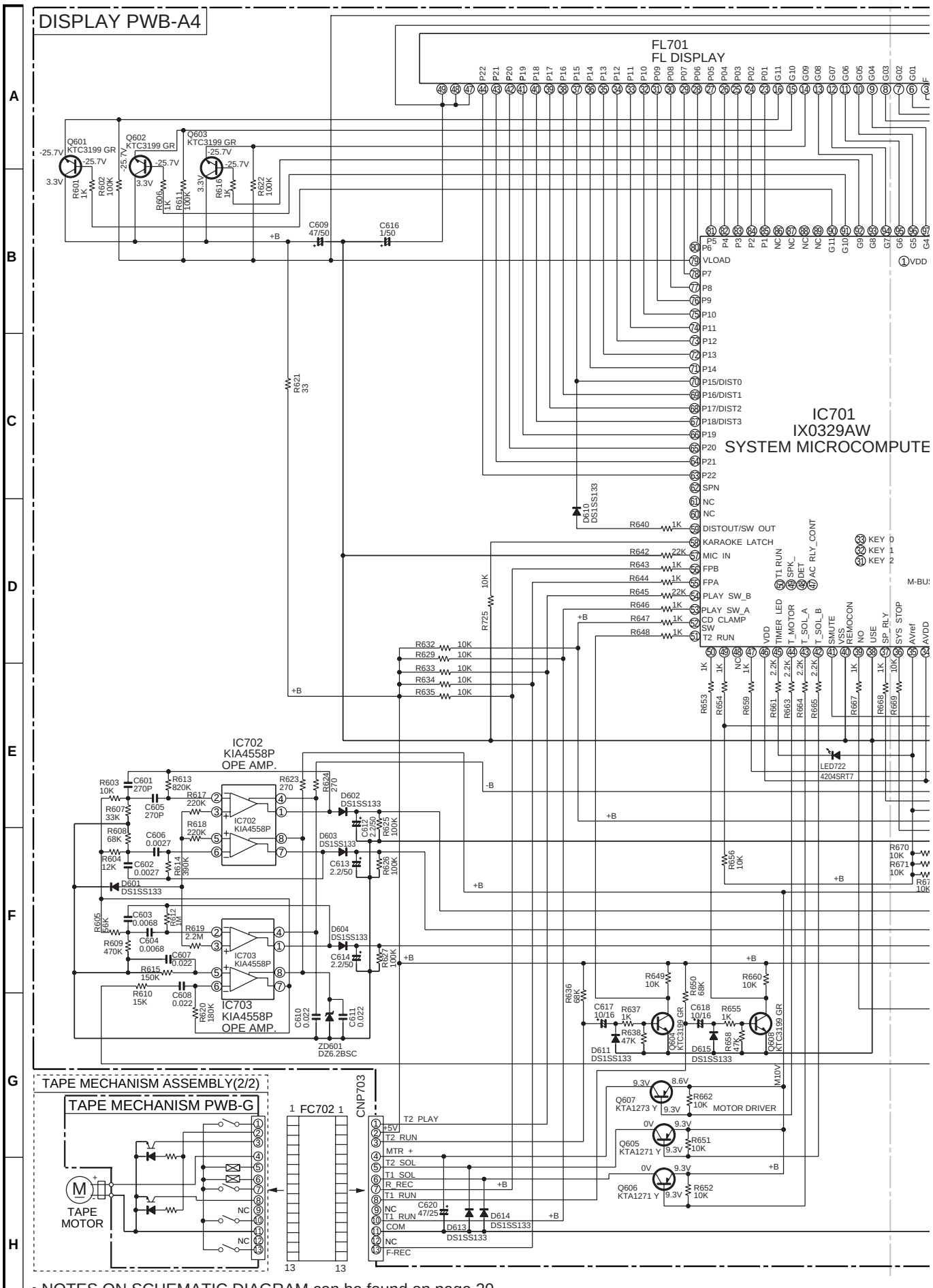
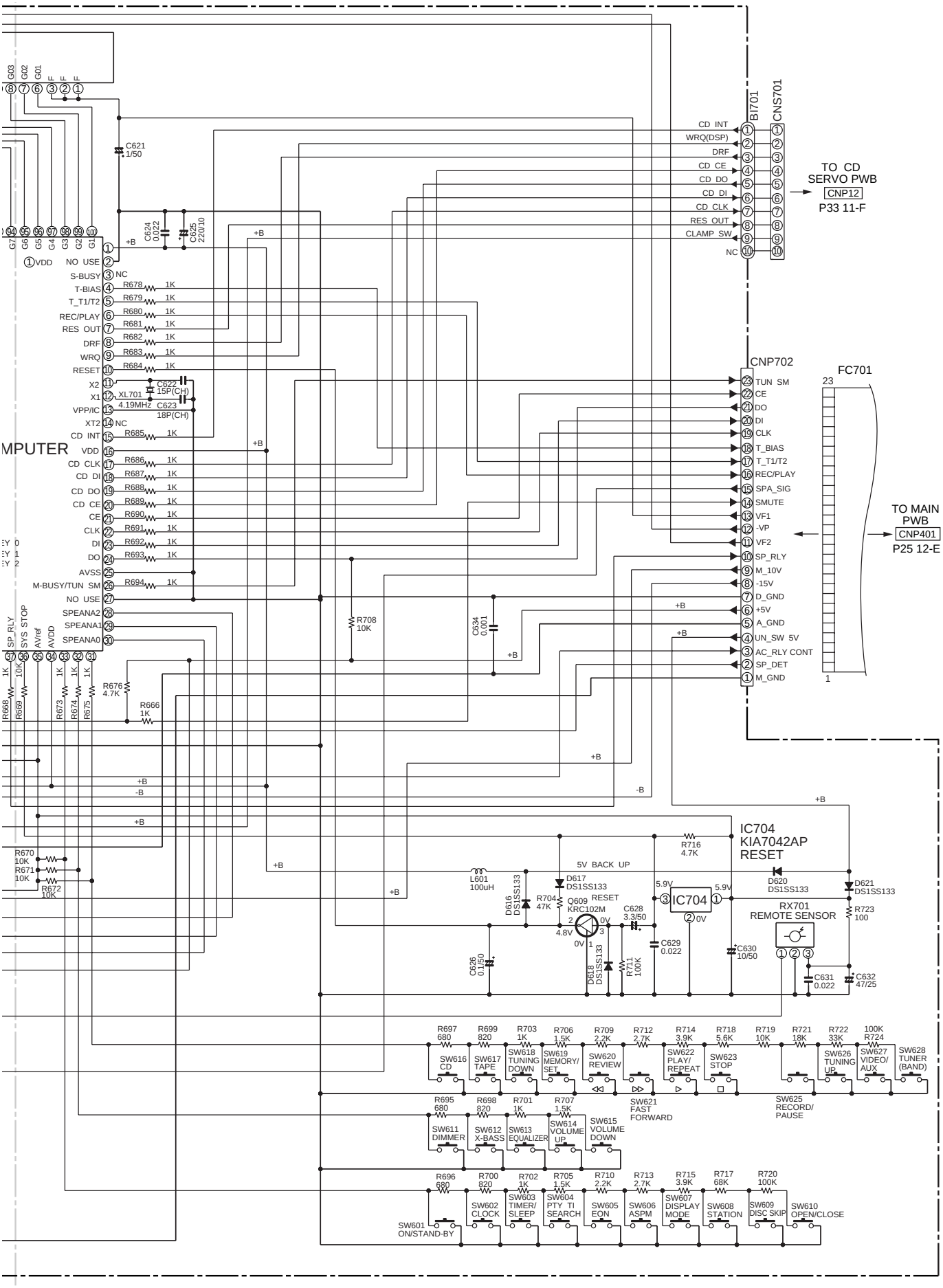
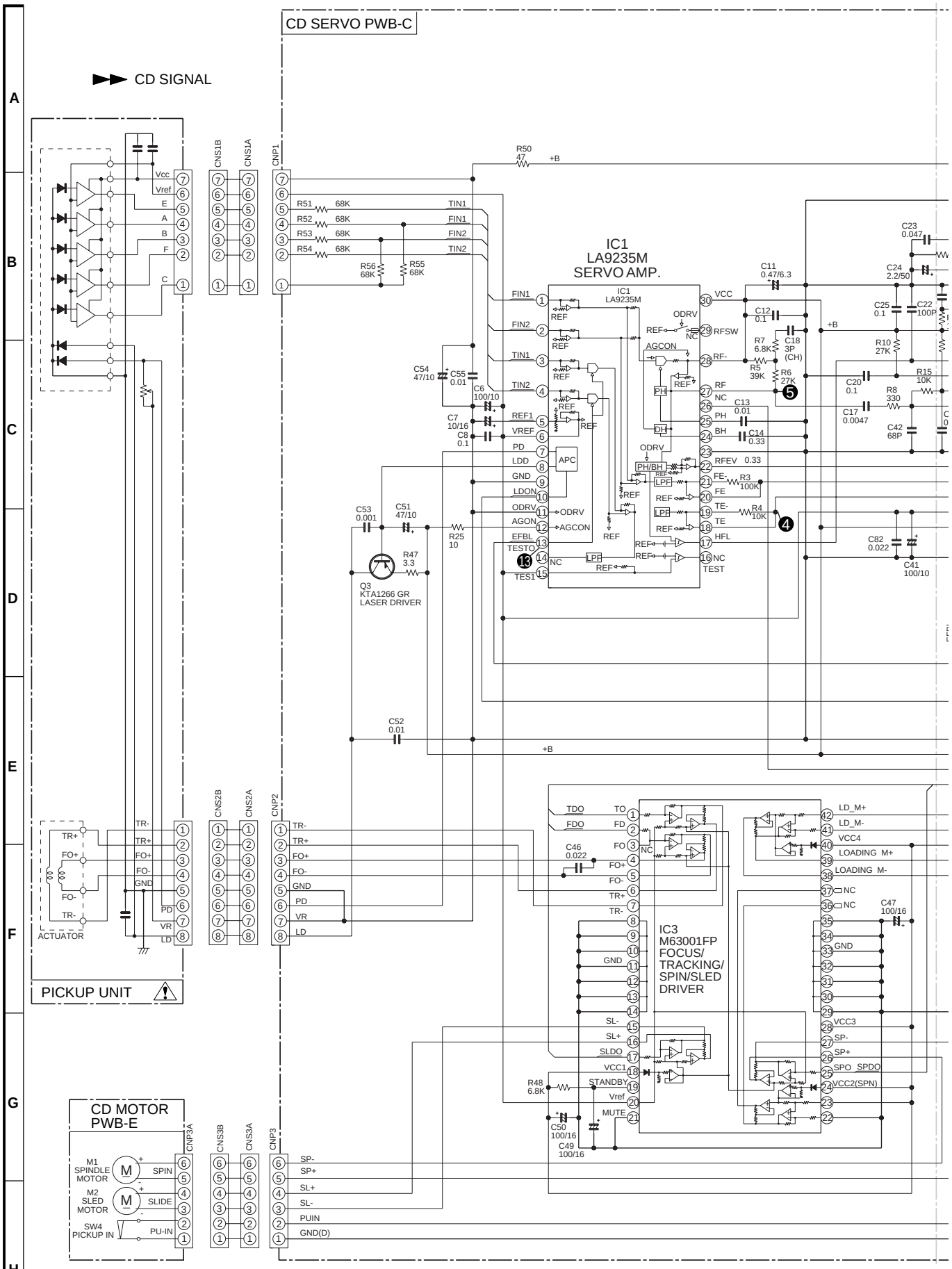


Figure 30 SCHEMATIC DIAGRAM (7/10)



7	8	9	10	11	12

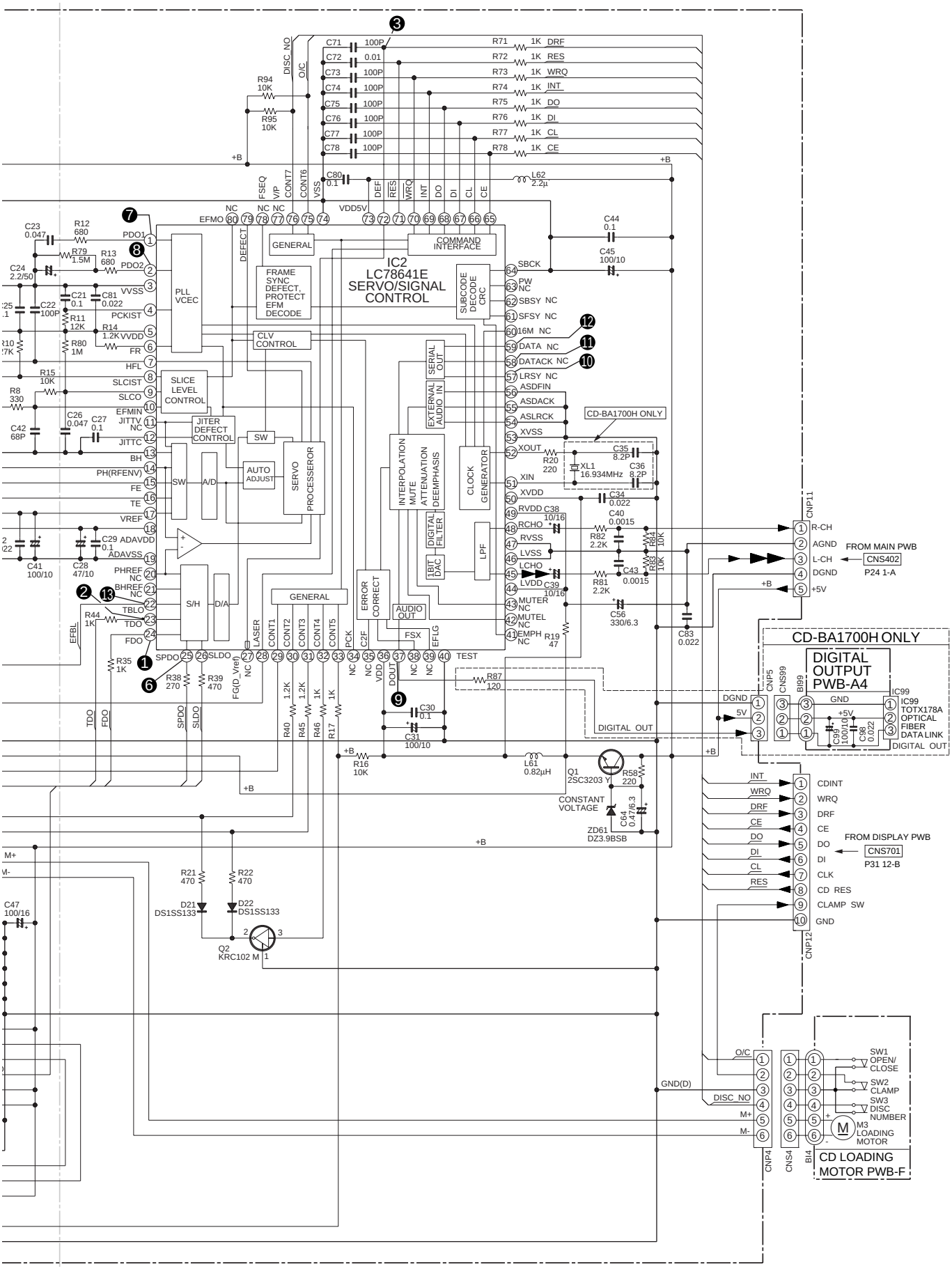
Figure 31 SCHEMATIC DIAGRAM (8/10)



• The numbers ❶ to ⓭ are waveform numbers shown in page 39.

• NOTES ON SCHEMATIC DIAGRAM can be found on page 20.

Figure 32 SCHEMATIC DIAGRAM (9/10)



7	8	9	10	11	12

Figure 33 SCHEMATIC DIAGRAM (10/10)

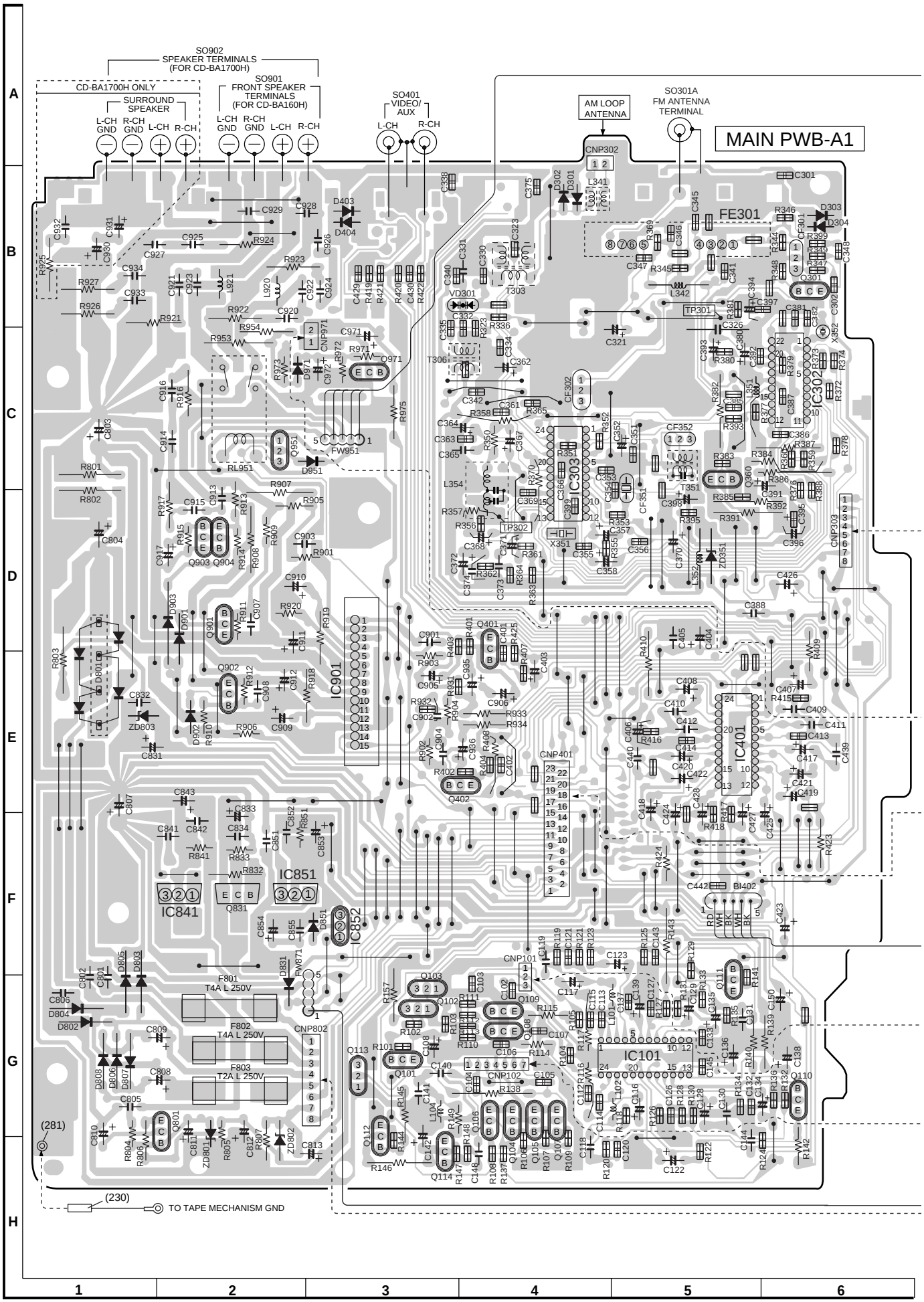
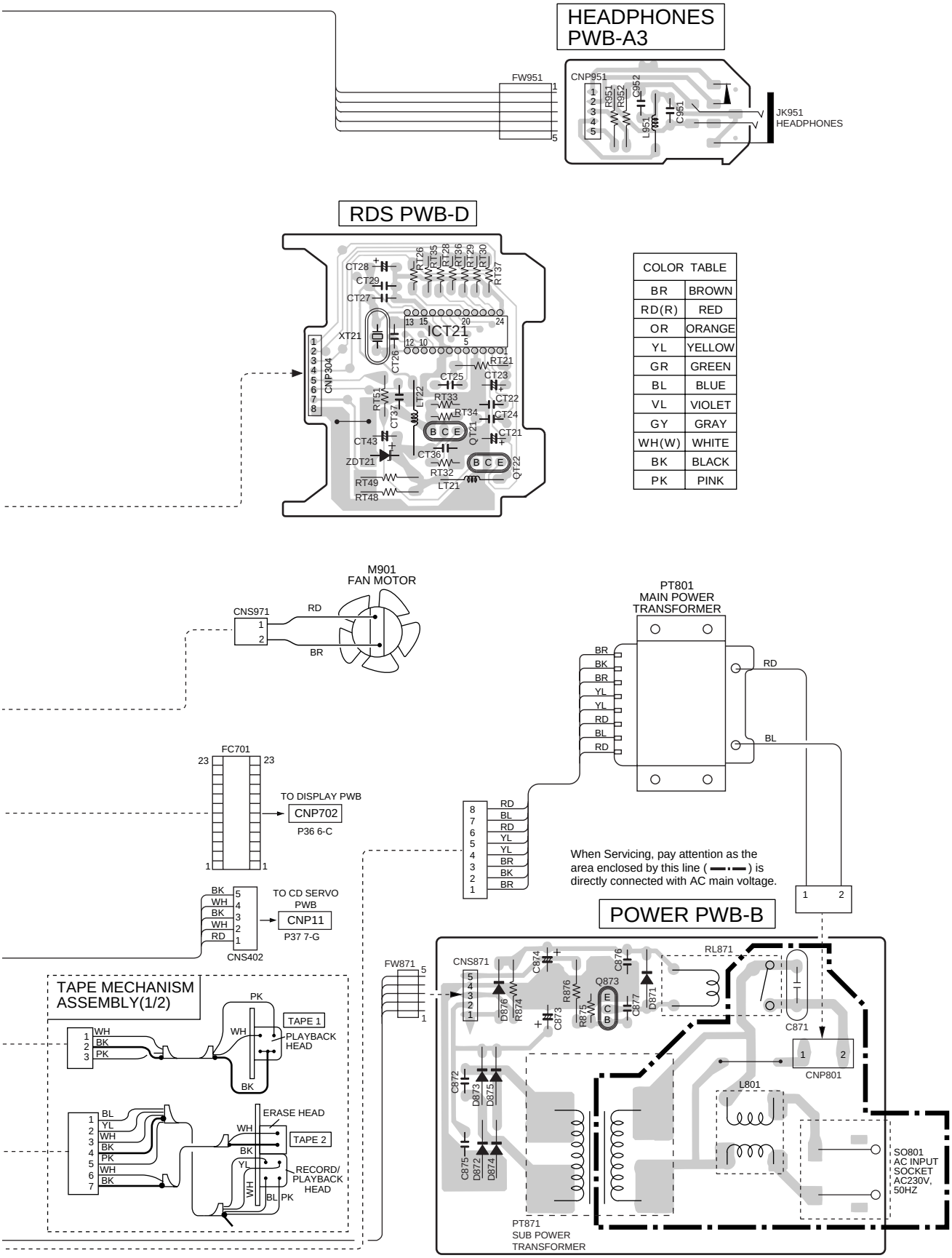


Figure 34 WIRING SIDE OF P.W.BOARD (1/4)



7	8	9	10	11	12

Figure 35 WIRING SIDE OF P.W.BOARD (2/4)

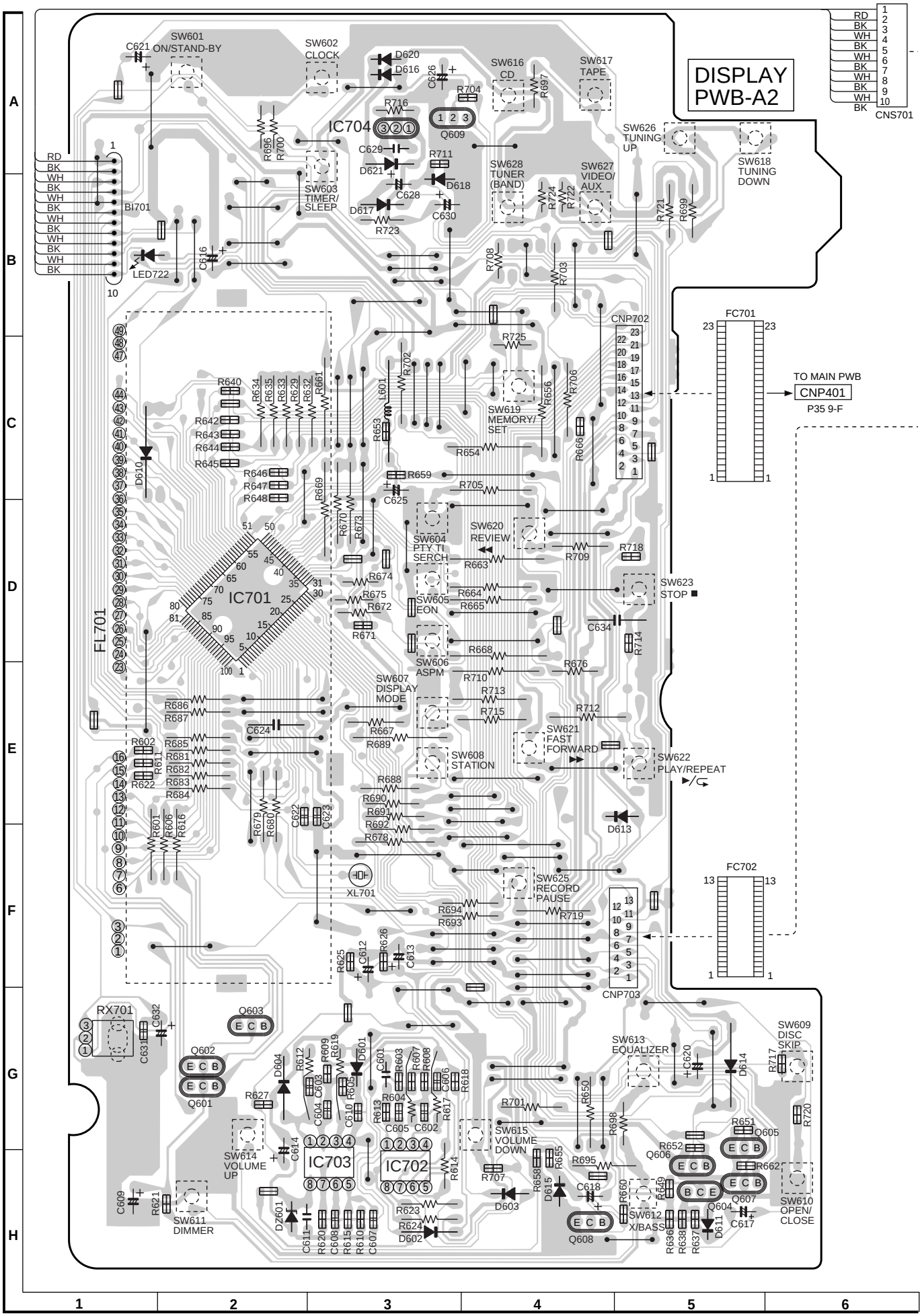
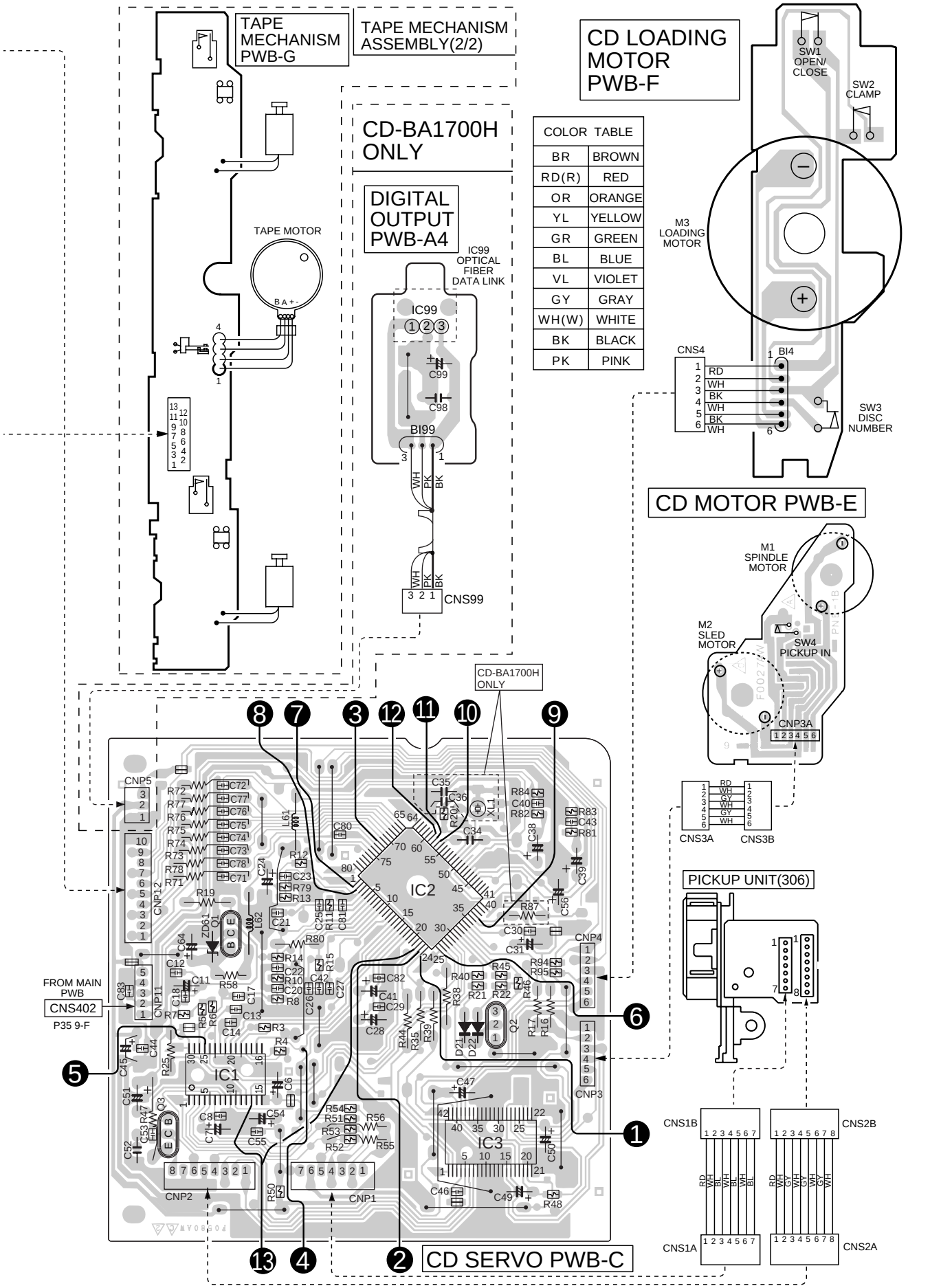


Figure 36 WIRING SIDE OF P.W.BOARD (3/4)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

• The numbers ❶ to ⓭ are waveform numbers shown in page 39.

7	8	9	10	11	12

Figure 37 WIRING SIDE OF P.W.BOARD (4/4)

VOLTAGE

IC1	
PIN NO.	VOLTAGE
1	1.6V
2	1.6V
3	1.6V
4	1.6V
5	1.6V
6	1.6V
7	0V
8	2.6V
9	0V
10	0V
11	0V
12	3.3V
13	1.6V
14	1.6V
15	1.6V
16	0V
17	0V
18	1.6V
19	1.6V
20	1.6V
21	1.6V
22	1.6V
23	0V
24	1.6V
25	0V
26	0V
27	0V
28	1.6V
29	1.6V
30	3.3V

IC3	
PIN NO.	VOLTAGE
1	1.6V
2	1.6V
3	1.8V
4	2.1V
5	2.1V
6	2.1V
7	2.1V
8	0V
9	0V
10	0V
11	0V
12	0V
13	0V
14	0V
15	2.1V
16	2.1V
17	1.6V
18	4.9V
19	3.5V
20	1.6V
21	0V
22	0V
23	4.9V
24	4.9V
25	1.6V
26	2.1V
27	2.1V
28	1.9V
29	0V
30	0V
31	0V
32	0V
33	0V
34	0V
35	0V
36	4.2V
37	0V
38	2.1V
39	2.1V
40	4.9V
41	2.1V
42	2.1V

IC2	
PIN NO.	VOLTAGE
1	0.7V
2	0V
3	0V
4	0V
5	3.3V
6	2.4V
7	0V
8	0V
9	1.6V
10	0V
11	4.7V
12	1.7V
13	0V
14	1.6V
15	1.6V
16	1.6V
17	1.6V
18	3.3V
19	0V
20	1.6V
21	1.6V
22	1.6V
23	1.6V
24	1.6V
25	1.6V
26	1.6V
27	1.6V
28	0V
29	0V
30	2.1V
31	2.1V
32	0V
33	3.3V
34	3.5V
35	3.3V
36	3.3V
37	3.3V
38	1.6V
39	1.6V
40	0V
41	0V
42	3.3V
43	3.3V
44	3.0V
45	1.5V
46	0V
47	0V
48	1.5V
49	3.0V
50	3.3V
51	1.8V
52	3.0V
53	0V
54	0V
55	0V
56	0V
57	1.7V
58	3.3V
59	0V
60	3.0V
61	1.6V
62	0V
63	2.4V
64	0V
65	0V
66	0V
67	0V
68	4.8V
69	4.9V
70	4.9V
71	4.6V
72	
73	4.9V
74	0V
75	0V
76	0V
77	3.2V
78	0V
79	0V
80	3.4V

IC101	
PIN NO.	VOLTAGE
1	0V(0V)
2	0V(0V)
3	0.5V(0.5V)
4	1.9V(1.9V)
5	0V(0V)
6	0V(0V)
7	0V(0V)
8	0.6V(0.6V)
9	3.3V(3.3V)
10	3.3V(3.3V)
11	0V(0V)
12	0V(0V)
13	6.7V(6.7V)
14	4.0V(4.0V)
15	0V(0V)
16	3.3V(3.3V)
17	0.6V(0.6V)
18	0V(0V)
19	0V(0V)
20	0V(0V)
21	1.9V(1.9V)
22	0.5V(0.5V)
23	0V(0V)
24	0V(0V)

IC301	
PIN NO.	VOLTAGE
1	0.8V(0V)
2	1.5V(0V)
3	3.6V(0.4V)
4	1.5V(0V)
5	0V(0V)
6	3.6V(0.4V)
7	2.8V(0.2V)
8	3.5V(0.3V)
9	3.6V(0.3V)

IC302	
PIN NO.	VOLTAGE
1	2.4V(2.4V)
2	0V(0V)
3	0V(0V)
4	0V(0V)
5	4.6V(4.7V)
6	4.8V(4.9V)
7	0.1V(9.9V)
8	4.2V(0V)
9	3.3V(0V)
10	3.4V(0V)
11	4.6V(4.9V)
12	2.2V(0V)
13	4.6V(4.9V)
14	0V(0V)
15	0V(2.4V)
16	2.3V(0V)
17	4.6V(4.9V)
18	0.8V(4.9V)
19	0.8V(4.9V)
20	1.1V(0V)
21	0V(0V)
22	2.5V(3.0V)

IC901	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	34.4V
5	-32.9V
6	0V
7	0V
8	35.4V
9	-35.4V
10	0V
11	0V
12	-34.0V
13	0V
14	0V
15	0V

IC852	
PIN NO.	VOLTAGE
1	19.4V
2	0V
3	5.76V

IC851	
PIN NO.	VOLTAGE
1	19.4V
2	0V
3	5V

IC841	
PIN NO.	VOLTAGE
1	19.41V
2	0V
3	10V

Q831	
PIN NO.	VOLTAGE
1	10.0V
2	19.41V
3	10.0V

IC704	
PIN NO.	VOLTAGE
1	5.0V
2	0V
3	5.0V

FE301	
PIN NO.	VOLTAGE
1	0V(0V)
2	0V(0V)
3	2.6V(0V)
4	2V(1.1V)
5	8.5V(0V)
6	0V(0V)
7	0V(0V)
8	0V(0V)

IC702	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	-11.0
5	0V
6	0V
7	0V
8	5.58V

IC703	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	-11.0
5	0V
6	0V
7	0V
8	5.58V

IC401	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	5V
5	5V
6	5V
7	5V
8	5V
9	5V
10	5V
11	5V
12	5V
13	5V
14	5V
15	5V
16	5V
17	5V
18	5V
19	5V
20	5V
21	5V
22	5V
23	10V
24	0V

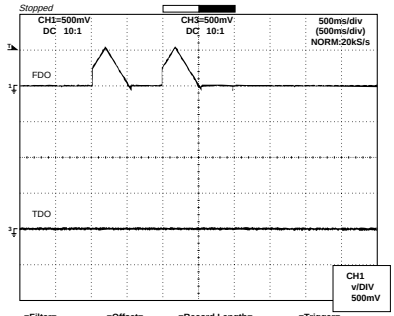
IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	5V	51	4.29V
2	0V	52	4.29V
3	5V	53	4.29V
4	0V	54	4.29V
5	5V	55	4.29V
6	5V	56	4.29V
7	5V	57	0V
8	1.2V	58	0V
9	0.87V	59	-27.8V
10	4.84V	60	-27.8V
11	2.38V	61	0V
12	2.06V	62	0V
13	0V	63	-27.7V
14	0V	64	-27.7V
15	1.4V	65	-27.7V
16	4.89V	66	-27.7V
17	4.8V	67	-27.7V
18	0V	68	-27.7V
19	2.3V	69	-20.4V
20	0V	70	-22.1V
21	0V	71	-25.9V
22	0V	72	-27.7V
23	0V	73	-24.1V
24	4.44V	74	-24.4V
25	0V	75	-25.9V
26	0.3V	76	-22.2V
27	0V	77	-22.2V
28	0V	78	-22.3V
29	0V	79	-27.8V
30	0V	80	-27.7V
31	5.1V	81	-27.7V
32	5.1V	82	-27.7V
33	5.1V	83	-20.3V
34	4.9V	84	-24.0V
35	5.0V	85	-20.3V
36	4.9V	86	2.38
37	4.9V	87	2.58V
38	0V	88	-25.8V
39	5V	89	-25.8V
40	0V	90	-25.7V
41	1.7V	91	-25.7V
42	8.0V	92	-25.7V
43	7.9V	93	-25.7V
44	8.0V	94	-25.7V
45	3.8V	95	-25.7V
46	4.89V	96	-25.7V
47	4.89V	97	-25.7V
48	4.89V	98	-25.7V
49	4.29V	99	-25.7V
50	4.29V	100	-25.7V

IC303	
PIN NO.	VOLTAGE
1	2.1V(2.1V)
2	4.5V(4.8V)
3	2.1V(2.1V)
4	2.1V(2.1V)
5	0V(0V)
6	4.6V(4.9V)
7	4.6V(4.9V)
8	2.4V(3.2V)
9	4.5V(4.8V)
10	3.9V(0V)
11	3.3V(1.8V)
12	3.3V(1.1V)
13	3.5V(2.0V)
14	1.2V(1.2V)
15	1.2V(1.2V)
16	2.0V(2.0V)
17	2.7V(0V)
18	2.1V(0.9V)
19	0V(1.9V)
20	0.3V(0.9V)
21	2.6V(2.0V)
22	2.6V(2.0V)
23	4.5V(4.8V)
24	3.0V(3.3V)

ICT21	
PIN NO.	VOLTAGE
1	2.6V
2	2.59V
3	5.2V
4	0V
5	2.72V
6	2.55V
7	0V
8	0V
9	0V
10	0V
11	0V
12	2.66V
13	2.56V
14	5.21V
15	0V
16	0V
17	0V
18	1.4V
19	1.7V
20	4.6V
21	4.3V
22	0V
23	0V
24	0V

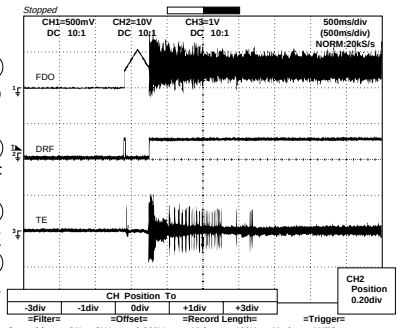
WAVEFORMS OF CD CIRCUIT

1 IC2 (24) FD
2 IC2 (23) TDO



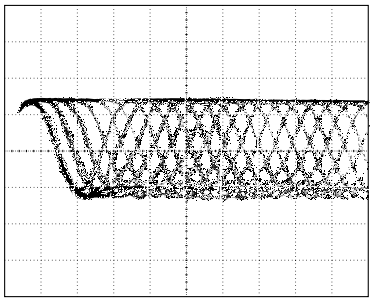
=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.000V Main : 100K Mode : AUTO
BW : FULL CH2 : 0.0V Zoom : 2K Type : EDGE CH1
CH3 : 0.000V Delay : 0.0ns
CH4 : 0.00V Hold off : 0.2us

1 IC2 (24) FD
3 IC2 (72) DEF
4 IC1 (18) TE
IC2 (19) TE-



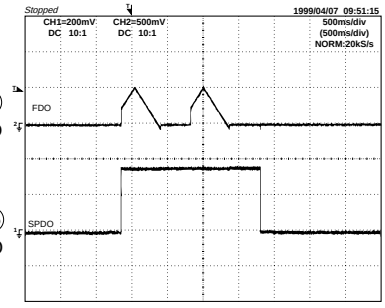
=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.000V Main : 100K Mode : AUTO
BW : FULL CH2 : 0.0V Zoom : 2K Type : EDGE CH1
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold off : 0.2us

5 IC1 (27) RF



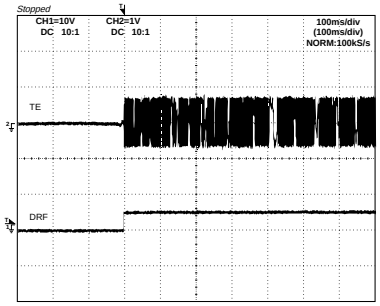
Vp-p=1.0V~1.3V
0.5mV/div,0.5µsec/div

1 IC2 (24) FD
6 IC2 (25) SPDO



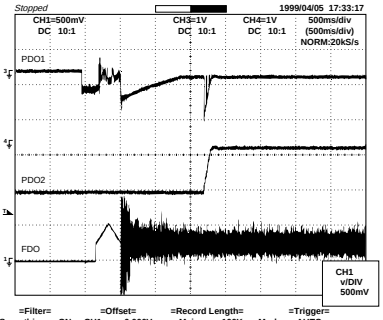
=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.000V Main : 100K Mode : NORMAL
BW : FULL CH2 : 0.000V Zoom : 2K Type : EDGE CH2
CH3 : 0.00V Delay : 2.924ms
CH4 : 0.00V Hold off : 0.2us

1 IC1 (18) TE
4 IC2 (19) TE-
3 IC2 (72) DEF



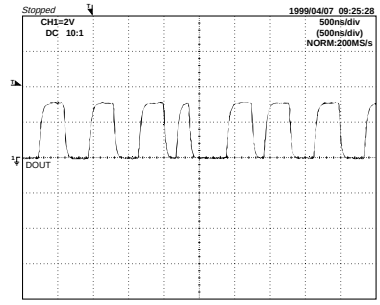
=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.0V Main : 100K Mode : NORMAL
BW : FULL CH2 : 0.00V Zoom : 2K Type : EDGE CH1
CH3 : 0.00V Delay : 2.924ms
CH4 : 0.00V Hold off : 0.2us

7 IC2 (1) PDO1
8 IC2 (2) PDO2
1 IC2 (24) FD



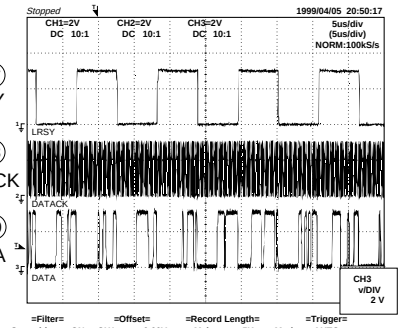
=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.000V Main : 100K Mode : AUTO
BW : FULL CH2 : 0.0V Zoom : 2K Type : EDGE CH2
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold off : 0.2us

9 IC2 (37) DOUT



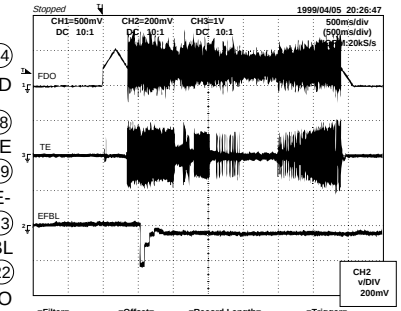
=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 1K Mode : NORMAL
BW : FULL CH2 : 0.00V Zoom : 100 Type : EDGE CH1
CH3 : 0.00V Delay : 2.887ms
CH4 : 0.00V Hold off : 0.2us

10 IC2 (57) LRSY
11 IC2 (58) DATACK
12 IC2 (59) DATA



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.00V Main : 5K Mode : AUTO
BW : FULL CH2 : 0.00V Zoom : 100 Type : EDGE CH3
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold off : 0.2us

1 IC2 (24) FD
4 IC1 (18) TE
IC2 (19) TE-
13 IC1 (13) EFBL
IC2 (22) TBLO



=Filter= =Offset= =Record Length= =Trigger=
Smoothing : ON CH1 : 0.000V Main : 100K Mode : SINGLE
BW : FULL CH2 : 0.000V Zoom : 2k Type : EDGE CH1
CH3 : 0.00V Delay : 0.0ns
CH4 : 0.00V Hold off : 0.2us

TROUBLE SHOOTING

When the CD does not function

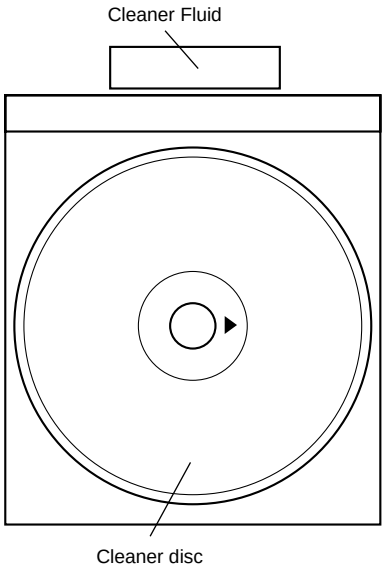
When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the trouble shooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.
Do not touch the lens with the bare hand.

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continuous to tum, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rines with clean water and seek medical advice.
- The CD cleaner disk must not be used on car CD players or on computer CD ROM drives.
- All rights reserved.Unauthorized duplicating, broadcasting and renting this product is

When a CD cannot be played

1. "E-CD01" is displayed.

(1) Check the power to IC2 (LC78641E), the presence of the clock signal (16.93 MHz) and the status of the RESET terminal (pin 71 on IC2).
(2) Did the pickup move to the PICKUP-IN Switch (SW4) position?

If (1) and (2) are OK, check the system microcomputer (especially the communication line with the DSP).

2. Pressing the CD operation key is accepted, but playback does not occur.

(1) Focus-HF system check
(2) Tracking system check
(3) Spin system check
(4) PLL system check
(5) Others

(1) Focus-HF system check

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the OPEN/CLOSE switch (SW1) without inserting a disc, and try starting the playback operation.

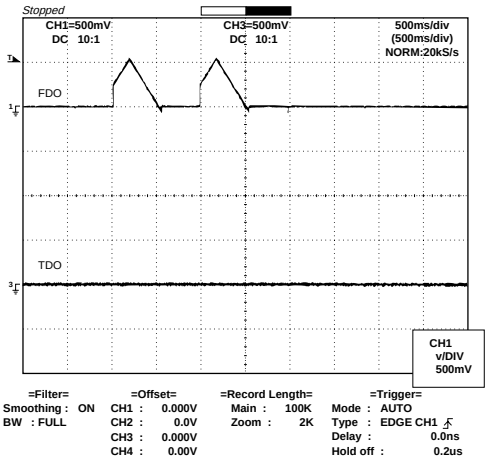


Figure 41-1

1. Did the pickup move to the PICKUP-IN Switch (SW4) position?
   - No → Sled motor (M2)
   - Yes ↓
2. Does the focus (lens) move up and down? (Waveform drawing 41-1).
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit?
   - No → Check the laser diode driver Q3 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating?
   - No → Spindle motor (M1).

When a disc is loaded, start playback operation.

1. Is focus servo activated? (Waveform drawing 41-2)
   - No → Pins 1~11 on IC1
     Check the laser diode driver Q3 peripheral circuit.
     Focus error circuit (pins 20 and 21 on IC1)
   - Yes ↓
2. Does DRF change from "L" to "H"?
   - No → Is the disc rotating?
     - No → Check the spin system.
     - Yes → If the disc is spinning and a HF waveform is generated, DRF will go H.
   - Yes ↓
3. Is the HF waveform normal? (Waveform drawing 41-3)
   - No → If the level is not normal, check around pins 27~29 on IC1.

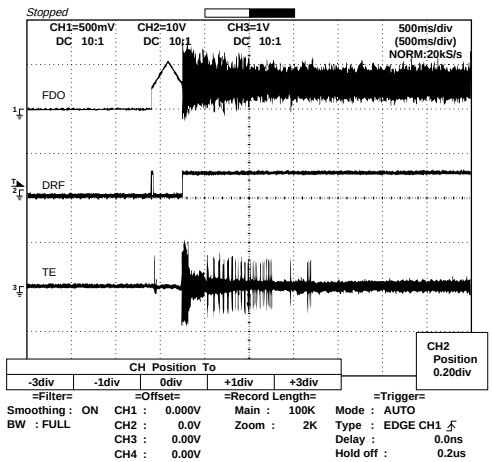


Figure 41-2

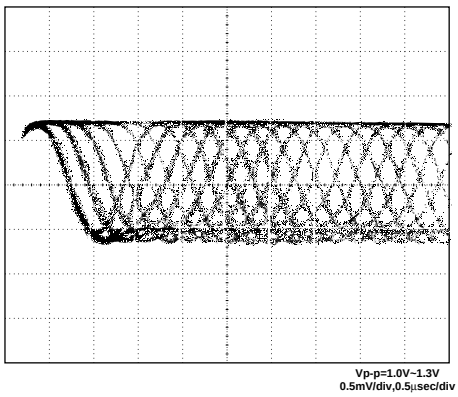


Figure 41-3

(2) Tracking system check

Check the TE waveform at pin 18 on IC1.

If the waveform shown in Figure 42-1 appears and soon after NO DISC appears.
- Yes → The tracking servo is not activated. Check the peripheral circuits at pins 18 and 19 on IC1, pin 23 on IC2, and CNS1A/B.
- No ↓

"Initialization" is possible, but play is not possible.
- Yes → A normal jump operation cannot be completed or the beginning of the track cannot be found. Check the around pin 23 on IC2.
- No ↓

"Initialization" is not possible. → Data cannot be read. Check the VCO-PLL system.

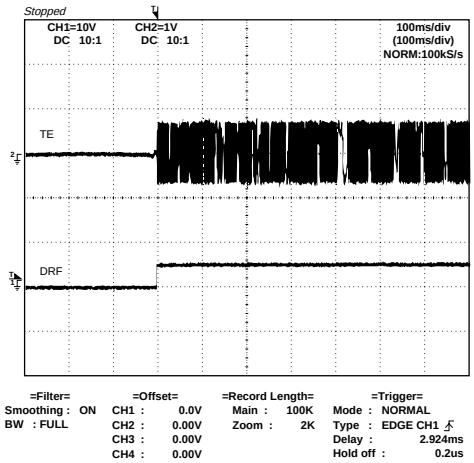

Stopped
CH1=10V DC 10:1
CH2=1V DC 10:1
100ms/div (100ms/div) NORM:100kS/s
TE
DRF
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.0V CH2 : 0.00V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : NORMAL Type : EDGE CH1 Delay : 2.924ms Hold off : 0.2us

Figure 42-1

(3) Spin system check

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

1. The turntable rotates a little. (Waveform drawing 42-2)
- Yes → The spin driver circuit is OK.
- No ↓

2. The turntable doesn't rotate. → Check around pin 25 on IC2, pins 15 and 16 on IC3, and CNS3A/B.

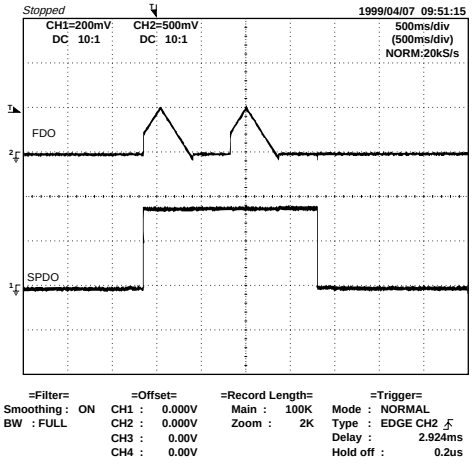

Stopped
1999/04/07 09:51:15
CH1=200mV DC 10:1
CH2=500mV DC 10:1
500ms/div (500ms/div) NORM:20kS/s
FDO
SPDO
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.000V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : NORMAL Type : EDGE CH2 Delay : 2.924ms Hold off : 0.2us

Figure 42-2

(4) PLL system check

When a disc is loaded, start play operation.

↓

The HF waveform is normal, but the TOC data cannot be read.

↓

Check the PDO waveform. (Figure 43-1)

↓

Check around pins 1~6 on IC2.

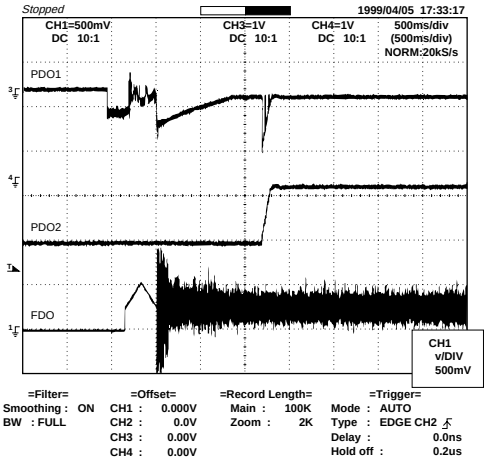


Figure 43-1

(5) Others

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has dropouts.

Is pin 35 (C2F) on IC2 "L"? — No → There are too many error flags on a damaged disc which makes error correction impossible.

↓ Yes

1. When playing at normal speed
   Check the peripheral circuit at pin 37 (DOUT) on IC2 and the waveform (Figure 43-2).

↓

If OK, Check the Unit.

↓

Check again using a known good disc.

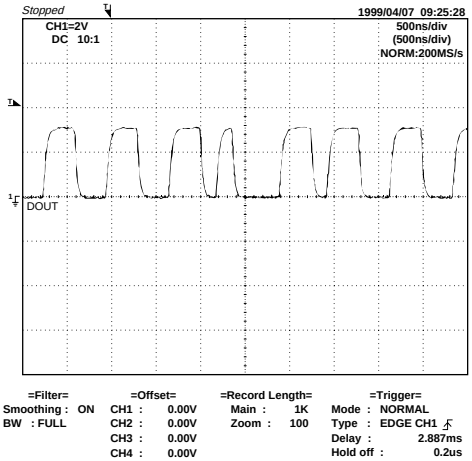
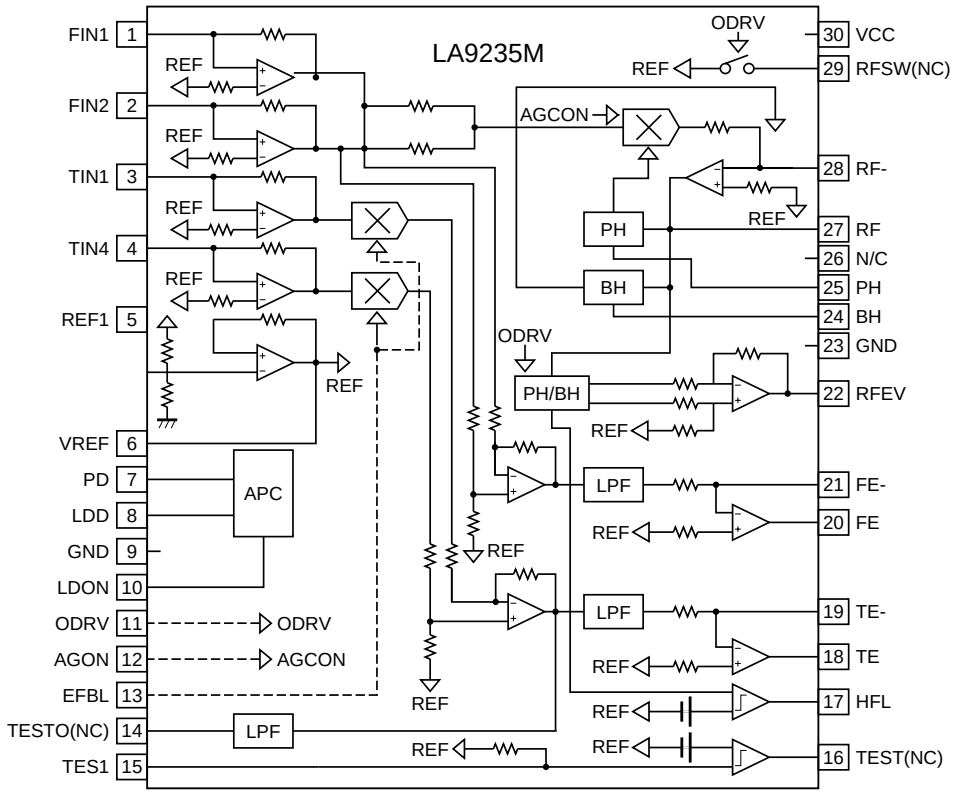


Figure 43-2

FUNCTION TABLE OF IC

IC1 VHiLA9235M/-1: Servo Amp. (LA9235M)



IC2 VHiLC78641E-1: Servo/Signal Control (LC78641E)

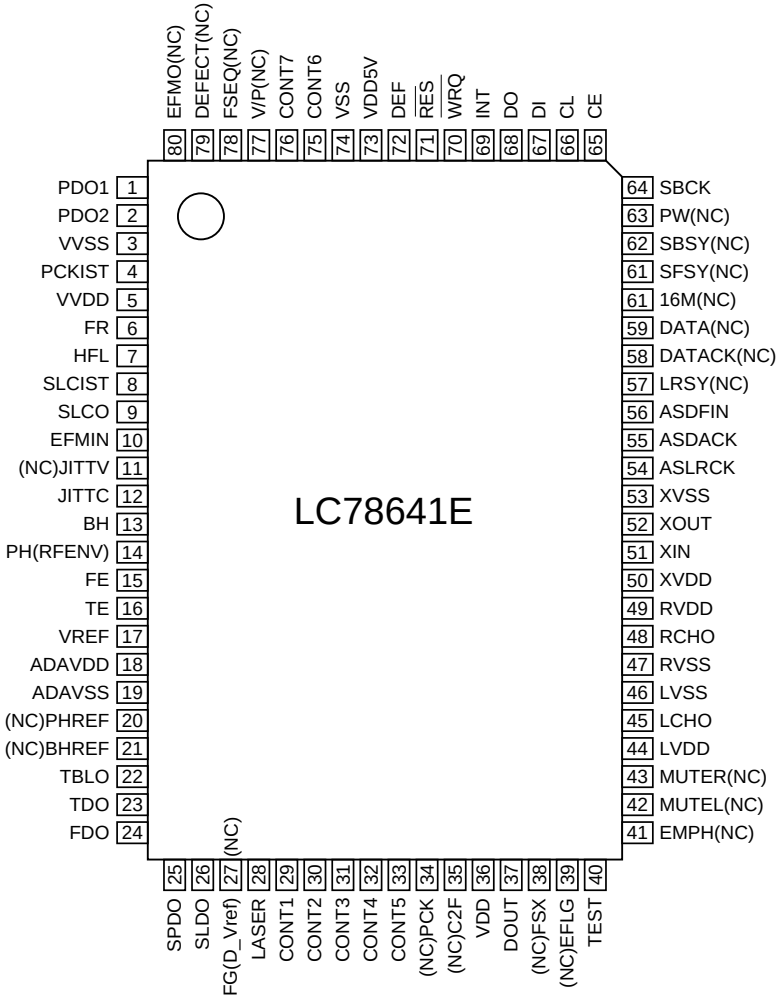


Figure 44 BLOCK DIAGRAM OF IC

IC2 VHiLC78641E-1: Servo/Signal Control (LC78641E) (1/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function		
1	PDO1	Output	–	For PULL	Phase-comparison output terminal for built-in VOC control.	
2	PDO2	Output	–		Phase-comparison output terminal for built-in VOC control. Rough servo : OFF, phase servo : ON.	
3	VVSS	–	–		Ground terminal for built-in VCO.	
4	PCKIST	AI	–		Resistor terminal for setting the PDO output current.	
5	VVDD	–	–		Power terminal for built-in VCO.	
6	FR	AI	–		Resistor terminal for setting the VCO frequency range.	
7	HFL	Input	–	Mirror detection signal input terminal.		
8	SLCIST	AI	–	For slice level control	Resistance connection terminal for current adjustment of SLCO output.	
9	SLCO	Output	–		Control output.	
10	EFMIN	Input	–		EFM signal input terminal.	
11*	JITTV	Output	Unfixed	Jitter detection/monitor terminal.		
12	JITTC	Output	–	Jitter detection/adjustment terminal.		
13	BH	Input	–	BH signal input terminal. A/D input.		
14	PH(RFENV)	Input	–	PH signal or RFENV signal input terminal. A/D input.		
15	FE	Input	–	FE signal input terminal. A/D input.		
16	TE	Input	–	TE signal input terminal. A/D input.		
17	VREF	Input	–	VREF signal input terminal. A/D input.		
18	ADAVDD	–	–	AD for servo, D/A power terminal.		
19	ADAVSS	–	–	AD for servo, D/A ground terminal.		
20*	PHREF	Output	(1/2VDD)	PH reference output terminal. D/A output.		
21*	BHREF	Output	(1/2VDD)	BH reference output terminal. D/A output.		
22	TBLO	Output	(1/2VDD)	Output terminal for tracking balance. D/A output.		
23	TDO	Output	(1/2VDD)	Output terminal for tracking control. D/A output.		
24	FDO	Output	(1/2VDD)	Output terminal for focus control. D/A output.		
25	SPDO	Output	(1/2VDD)	Output terminal for spindle control. D/A output.		
26	SLDO	Output	(1/2VDD)	Output terminal for sled control. D/A output.		
27*	FG	Input	–	FG signal input terminal. (When not used,connect to 0V)		
28	LASER	Output	L	LASER ON/OFF control terminal.		
29	CONT1	In/Output	Input mode	General purpose input/output terminal 1.		Controlled with serial data command from microcomputer. When not used, set it as the input terminal and open it by connecting to 0V, or set it as the output terminal and open it.
30	CONT2	In/Output	Input mode	General purpose input/output terminal 2.		
31	CONT3	In/Output	Input mode	General purpose input/output terminal 3.		
32	CONT4	In/Output	Input mode	General purpose input/output terminal 4.		
33	CONT5	In/Output	Input mode	General purpose input/output terminal 5.		
34*	PCK	Output	H	Clock monitor terminal for EFM data replay. 4.3218MHz as phase clock.		
35*	C2F	Output	H	C2 flag output terminal.		
36	VDD	–	–	Power terminal of digital system.		
37	DOUT	Output	L	Output terminal of digital OUT. (EIAJ format)		
38*	FSX	Output	L	Output terminal of synchronous signal of 7.35kHz divided from quartz oscillation.		
39*	EFLG	Output	L	C1,C2 correct monitor terminal.		
40	TEST	Input	–	Input terminal for test. Surely connected to 0V.		
41*	EMPH	In/Output	Input mode	Emphasis terminal. After resetting, it is configured as an input terminal. It can be controlled from the outside. It is also becomes a emphasis monitor terminal under command control.		
42*	MUTEL	Output	H	Mute output terminal for L channel.		
43*	MUTER	Output	H	Mute output terminal for R channel.		

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC2 VHiLC78641E-1: Servo/Signal Control (LC78641E) (2/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
44	LVDD	–	–	L channel	Power terminal for L channel.
45	LCHO	Output	1/2VDD	D/A converter	L channel output terminal.
46	LVSS	–	–		Ground terminal for L channel. Surely connected to 0V.
47	RVSS	–	–	R channel	Ground terminal for R channel. Surely connected to 0V.
48	RCHO	OUTPUT	1/2VDD	D/A converter	R channel output terminal.
49	RVDD	–	–		Power terminal for R channel.
50	XVDD	–	–	For quartz	Power terminal for quartz oscillation.
51	XIN	Input	Oscillation	oscillation	Ground terminal of 16.9344MHz quartz oscillation.
52	XOUT	Output	Oscillation		
53	XVSS	–	–		Ground terminal for quartz oscillation. Surely connected to 0V.
54	ASLRCK	Input	–	For anti	L/R clock input terminal. (When not used,connect to 0V)
55	ASDACK	Input	–	shock mode	Bit clock input terminal. (When not used,connect to 0V)
56	ASDFIN	Input	–		L/R channel data input terminal. (When not used,connect to 0V)
57*	LRSY	Output	L	For digital	L/R clock output terminal.
58*	DATACK	Output	L	data output	Bit clock output terminal.
59*	DATA	Output	L		L/R channel data output terminal.
60*	16M	Output	Clock output	16.9344MHz output terminal.	
61*	SFSY	Output	L	Output terminal of synchronous signal of subcode frame. It drops when subcode stand by.	
62*	SBSY	Output	L	Output terminal of synchronous signal of subcode block.	
63*	PW	Output	L	Output terminal of subcodes P,A,R,S,T,U and W.	
64	SBCK	Input	–	Clock input terminal to read subcode. (When not used,connect to 0V)	
65	CE	Input	–	For	Chip enable signal input terminal.
66	CL	Input	–	microcomputer	Data transmission clock input terminal.
67	DI	Input	–	interface	Data input terminal.
68	DO	Output	L		Data output terminal.
69	INT	Output	H		Interruption signal output terminal.
70	WRQ	Output	H		Interruption signal output terminal.
71	RES	Input	–	Reset input terminal of LC78640. When turning on power, set it at "L".	
72	DEF	Output	L	Focus ON detection terminal.	
73	VDD5V	–	–	Power terminal for microcomputer interface.	
74	VSS	–	–	Ground terminal of digital system. Surely connected to 0V.	
75	CONT6	In/Output	Input mode	General purpose input/output terminal 6.	Controlled with serial data command from microcomputer. When not used, set it as the input terminal and open it by connecting to 0V, or set it as the output terminal and open it.
76	CONT7	In/Output	Input mode	General purpose input/output terminal 7.	
77*	V/ P	Output	H	Monitor output terminal for automatic switch of rough servo/phase control. "H" for rough servo, and "L" for phase servo.	
78*	FSEQ	Output	L	Output terminal synchronous signal detection. "H" is output when synchronous signal detected by EFM signal matches synchronous signal internally generated.	
79*	DEFECT	In/Output	Input mode	Defect terminal. After resetting, it is configured as an input terminal. It can be controlled from the outside. It also becomes a defect monitor terminal under command control	
80*	EFMO	Output	Unfixed	EFM signal output terminal.	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Be sure to supply the same potential to each power terminal. (VVDD,ADAVDD,VDD,LVDD,RVDD,XVDD)
Terminal witch is controlled by the power terminal (VDD5V) for a microcomputer interface :
CE (65pin), CL (66pin), DI (67pin), DO (68pin), INT (69pin), WRQ (70pin), RES (71pin), DEF (72pin),
CONT6 (75pin), CONT7 (76pin)

IC701 RH-iX0329AWZZ: System Microcomputer (IX0329AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	VDD	VDD	—	(+) Power supply
2	P37	NO USE	—	GND
3*	P36	S-BUSY	Output	Commijntcate to MPEG μ–COM
4	P35	T–BIAS	Output	Tape record BIAS
5	P34	T–T1/T2	Output	Tape T1/T2 change
6	P33	REC/PLAY	Output	Tape REC/PLAY change
7	P32	RES OUT	Output	CD DSP reset & MPEG μ-COM reset
8	P31	DRF	Input	CD RF level detection
9	P30	WRQ	Input	CD DSP write requset
10	RESET	RESET	Input	Reset
11	X2	X2	Output	Main clock
12	X1	X1	Input	Main clock
13	Vpp/IC	VPP/IC	—	GND
14*	XT2	XT2	—	Open
15	P04	CD INT	Input	CD DSP interrupt
16	VDD	VDD	—	(+) Power supply
17	P27	CD CLK	Output	CD DSP Clock/MPEG μ-COM clock
18	P26	CD DI	Outout	CD DSP Command/MPEG μ-COM COMMA
19	P25	CD DO	Input	CD DSP code Q Out/MPEG μ-COM data input
20	P24	CD CE	Output	CD DSP CE output
21	P23	CE	Output	CE output
22	P22	CLK	Output	CLOCK output
23	P21	DI	Output	DATA output
24	P20	DO	Output	DATA input
25	AVss	AVSS	—	Analog ground
26	P17/ANI7	M-BUSY/TUN SM	Input	Tuner signal meter input Communjcate to MPEG μ-COM M_BUSY
27	ANI6	NO USE	Input	GND
28	ANI5	SPEANA 2	Input	SPEANA data input 16 kHz
29	ANI4	SPEANA 1	Input	SPEANA data input 1 kHz
30	ANI3	SPEANA 0	Input	SPEANA data input 63 kHz
31-33	ANI2-ANI0	KEY2-KEY0	Input	Key input
34	AVDD	AVDD	—	Analog VDD
35	AVREF	AVref	—	Analog REF voltage
36	INTP3	SYS STOP	Input	System stop input
37	P02	SP_RLY	Output	Speaker output relay control
38	INTP1	NO USE	Input	GND
39	INTP0	REMOCON	Input	Remocon input
40	Vss	VSS	—	Ground voltage
41	P74	SMUTE	Output	System mute control
42	P73	T_SOL_B	Output	Tape2 solenoid control
43	P72	T_SOL_A	Output	Tape1 solenoid control
44	P71	T_MOTOR	Output	Tape motor control
45	P70	TIMER LED	Output	Timer LED control
46	VDD	VDD	—	(+) Power supply
47	P127	AC RLY_CONT	Output	AC relay control
48*	P126	NC	—	Open
49	P125	SPK_DET	Input	Speaker output detection
50	P124	T1 RUN	Input	Tape1 ran pluse input
51	P123	T2 RUN	Input	Tape2 ran pluse input
52	P122	CD CLAMP SW	Intput	CD changer clamp switch
53	P121	PLAY SW_A	Input	Play switch for T1

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0329AWZZ: System Microcomputer (IX0329AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
54	P120	PLAY SW_B	Input	Play switch for T2
55	P119	FPA	Input	Tape2 A–side full proof
56	P118	FPB	Input	Tape2 B_side full proof
57	P117	MIC IN	Input	Mic switch
58	P116	KARAOKE LATCH	Output	KARAOKE latch (When not used, connect to 0V)
59	P115	DISTOUT/SW OUT	Output	Distination output
60*	FIP39	SPN	Input	Tuner span change
61*,62*	FIP38-FIP37	NC	Input	Open
63-66	FIP36-FIP33	P22-P19	Output	FL diaplay daiver
67-70	FIP32-FIP29 P103-P100	P18-P15 DIST3-DIST0	Output Input	FL diaplay daiver Distination intput
71-78	FIP28-FIP21	P14-P7	Output	FL display driver
79	VLOAD	VLOAD	—	FL driver (–) power supply.–30V
80-85	FIP20-FIP15	P6-P1	Output	FL display segment
86*-89*	FIP14-FIP11	NC	Input	Open
90-100	FIP30-FIP0	G11-G1	Output	FL display segment driver

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC3 VHiM63001FP-1: Focus/Tracking/Spin/Sled Driver (M63001FP)

Pin No.	Terminal Name	Function
1	IN2-	CH2 inverted input.
2	IN1A-	CH1 inverted input.
3*	IN1B-	CH1 output offset control.
4	OUT1-	CH1 inverted output.
5	OUT1+	CH1 non-inverted output.
6	OUT2-	CH2 inverted output.
7	OUT2+	CH2 non-inverted output.
8-14	GND	GND
15	OUT3+	CH3 non-inverted output.
16	OUT3-	CH3 inverted output.
17	IN3-	CH3 inverted input.
18	VCC1	Power supply 1 (CH1, CH2, CH3)
19	STANDBY	STANDBY signal input.
20	VRFE	CH1-CH4 Reference voltage input.
21	MUTE	Mute signal input (CH6).
22	IN5-	CH5 inverted input.
23	IN5+	CH5 non-inverted input.
24	VCC2	Power supply 2 (CH4).
25	IN4-	CH4 inverted input.
26	OUT4-	CH4 inverted output.
27	OUT4+	CH4 non-inverted output.
28	VCC3	Power supply 3 (CH5).
29-35	GND	GND
36*	OUT5+	CH5 non-inverted output.
37*	OUT5-	CH5 inverted output.
38	OUT6+	CH6 non-inverted output.
39	OUT6-	CH6 inverted output.
40	VCC4	Power supply 4 (CH6).
41	IN6-	CH6 inverted input.
42	IN6+	CH6 non-inverted input.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

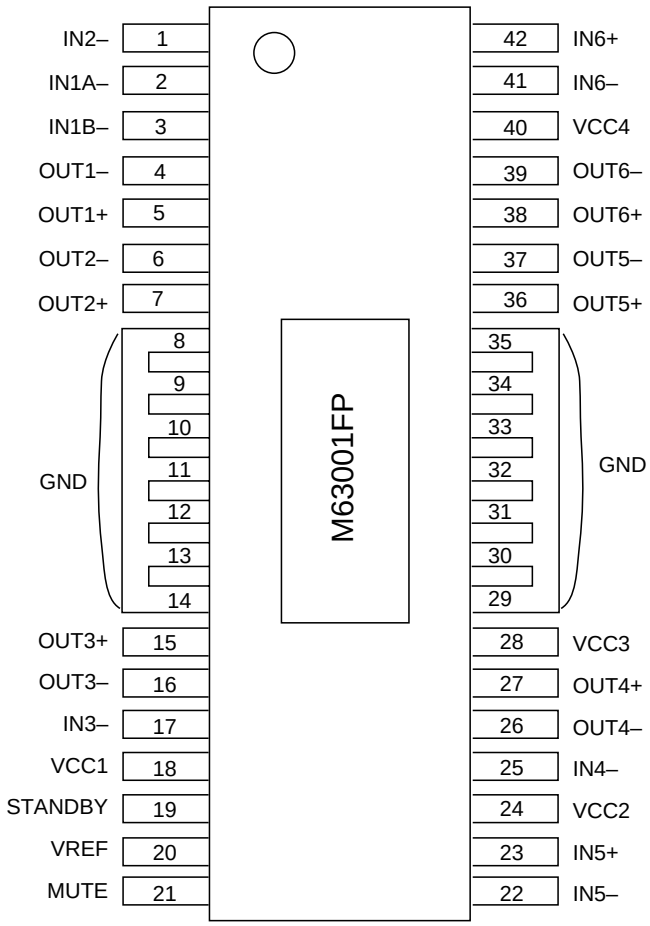


Figure 48 BLOCK DIAGRAM OF IC

IC401 VHiLC75341/-1: Audio Processor (LC75341)

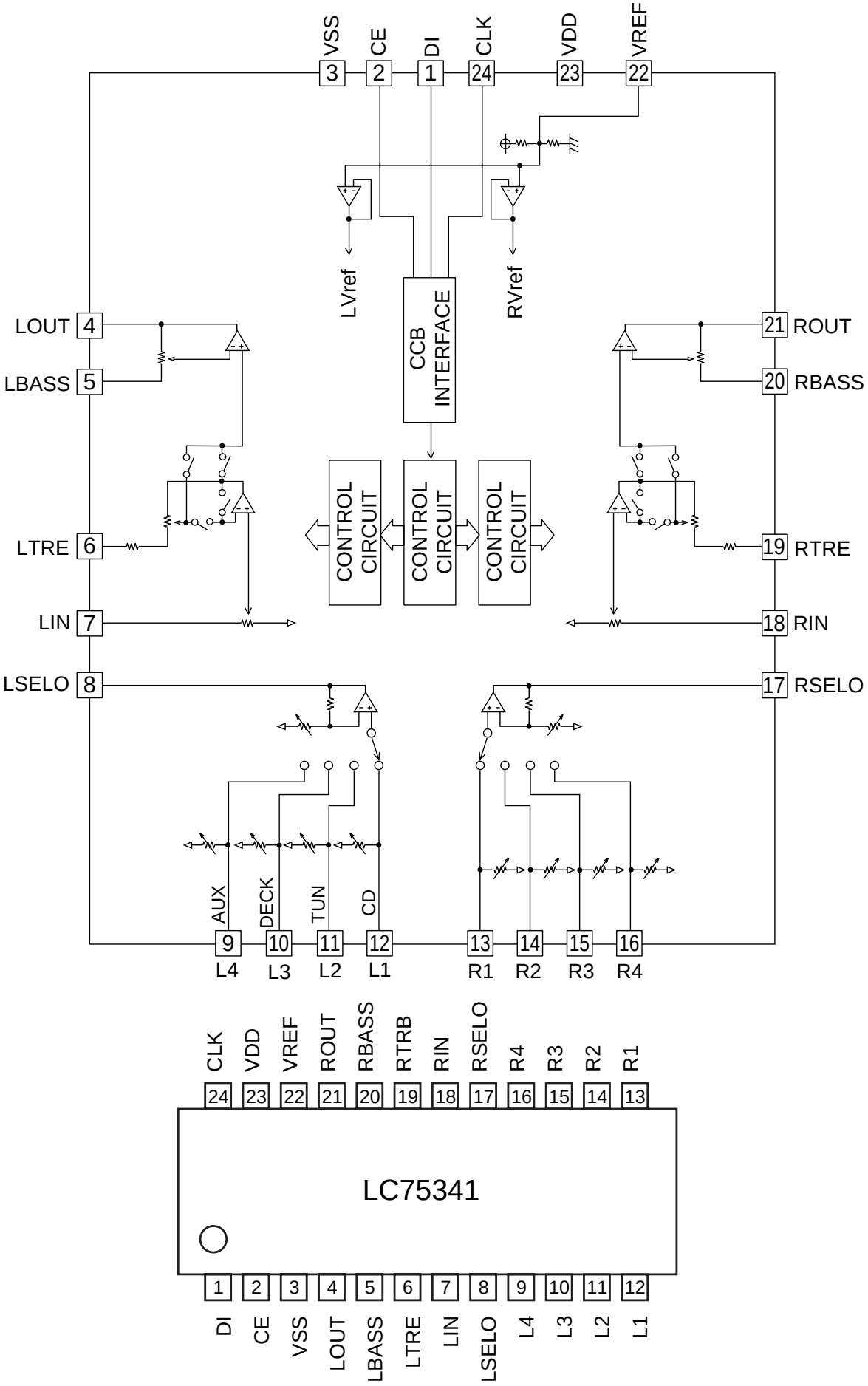
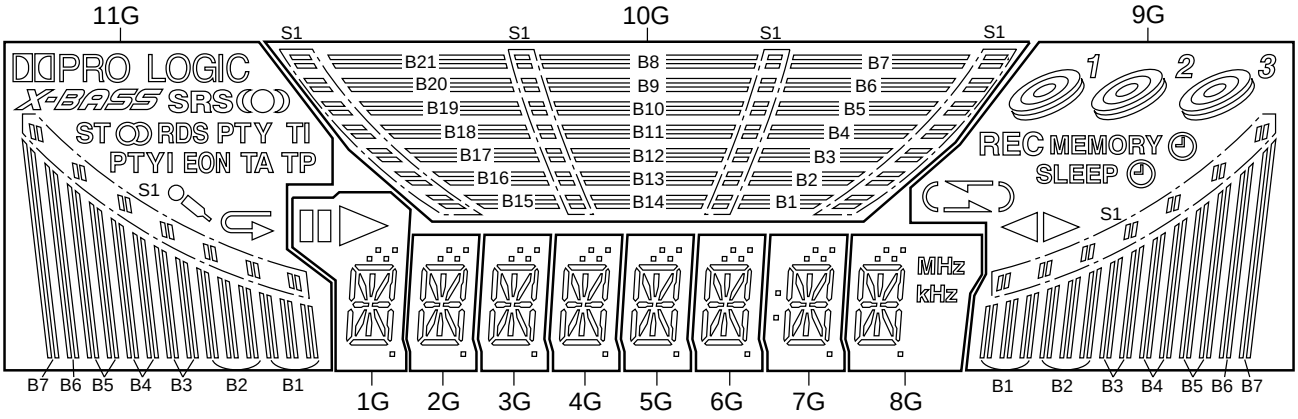
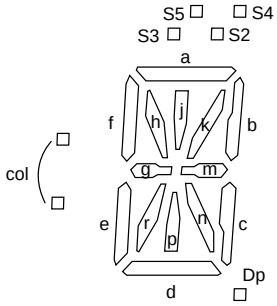


Figure 49 BLOCK DIAGRAM OF IC

CD-BA160H/1700H

FL701 VVKBJ749GNK-1: FL Display





	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	S1	S1	S1	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp
P2	B1	B1	B1	d	d	d	d	d	d	d	d
P3	B2	B2	B2	c	c	c	c	c	c	c	c
P4	B3	B3	B3	n	n	n	n	n	n	n	n
P5	B4	B4	B4	p	p	p	p	p	p	p	p
P6	B5	B5	B5	r	r	r	r	r	r	r	r
P7	B6	B6	B6	e	e	e	e	e	e	e	e
P8	B7	B7	B7	m	m	m	m	m	m	m	m
P9	PRO LOGIC	B8	1	g	g	g	g	g	g	g	g
P10	X-BASS	B9	2		col						
P11	SRS	B10	3	b	b	b	b	b	b	b	b
P12	ST	B11	REC	k	k	k	k	k	k	k	k
P13		B12	MEMORY	j	j	j	j	j	j	j	j
P14	RDS	B13		h	h	h	h	h	h	h	h
P15	PTY	B14		f	f	f	f	f	f	f	f
P16	TI	B15	SLEEP	a	a	a	a	a	a	a	a
P17	TP	B16		S2	S2	S2	S2	S2	S2	S2	S2
P18	TA	B17		S3	S3	S3	S3	S3	S3	S3	S3
P19	PTYI	B18		S4	S4	S4	S4	S4	S4	S4	S4
P20	EON	B19		S5	S5	S5	S5	S5	S5	S5	S5
P21		B20		MHz							
P22		B21		kHz							

Figure 50 FL DISPLAY

SHARP PARTS GUIDE

MODEL CD-BA160H
CD-BA1700H

CD-BA160H mini component system consisting of CD-BA160H (main unit) and CP-BA160H (speaker system).

CD-BA1700H mini component system consisting of CD-BA1700H (main unit), CP-BA1700H (front speakers) and GBOXS0041AWM1 (surround speakers).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN..... Cylindrical type (without lead wire)
VC • • TV..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN..... Cylindrical type (without lead wire)
VR • • TV..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

CD-BA160H/1700H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

CD-BA160H/1700H

INTEGRATED CIRCUITS

IC1	VHILA9235M/-1	J	AQ	Servo Amp.,LA9235M
IC2	VHILC78641E-1	J	AV	Servo/Signal Control,LC78641E
IC3	VHIM63001FP-1	J	AX	Focus/Tracking/Spin/Sled Driver, M63001FP
IC99	VHPTOTX178A-1	J	AP	Optical Fiber Data Link, TOTX178A[CD-BA1700H Only]
IC101	VHIAN7345K/-1	J	AM	Playback and Record/ Playback Amp.,AN7345K
IC302	VHILC72131/-1	J	AP	PLL (Tuner) LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC401	VHILC75341/-1	J	AM	Audio Processor,LC75341
IC701	RH-IX0329AWZZ	J	AX	System Microcomputer, IX0329AW
IC702,703	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P
IC704	VHIKIA7042AP1	J	AC	Reset,KIA7042AP
IC841	VHIKIA7810AP1	J	AF	Voltage Regulator,KIA7810AP
IC851	VHIKIA7805P-1	J	AF	Voltage Regulator,KIA7805P
IC852	VHIAN78L05/-1	J	AE	Constant Voltage Regulator, AN78L05
IC901	VHISTK40204-1	J	AX	Power AMP.,STK40204
ICT21	VHILC72722/-1	J	AY	RDS Circuit,LC72722

TRANSISTORS

Q1	VS2SC3203Y/-1	J		Silicon,NPN,2SC3203 Y
Q2	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q3	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q101	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q102,103	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q104~107	VS2SC1845F/-1	J	AC	Silicon,NPN,2SC1845 F
Q108~111	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q112	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q113	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q114	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q401,402	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q601~604	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q605,606	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q607	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q608	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q609	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q801	VSKTA1274Y/-1	J	AE	Silicon,PNP,KTA1274 Y
Q831	VSKTC2026//-1	J	AF	Silicon,NPN,KTC2026
Q871	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q873	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q901~904	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q951	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q971	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
QT21,22	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR

DIODES

D21,22	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D301~304	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D403,404	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D601~604	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D610,611	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D613~618	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D620,621	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D801	VHDTS6B04GM-1	J	AP	Silicon,TS6B04GM
D802~808	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D831	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D851	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D871~875	VHD1N4004S/-1	J	AB	Silicon,1N4004S
D876	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D901~903	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D951	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D971	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
LED722	VHP4204SRT7-1	J	AD	LED,Red,4204SRT7
ZD61	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
ZD351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD601	VHEDZ6R2BSC-1	J	AB	Zener,6.2V,DZ6.2BSC
ZD801	VHEDZ300BSB-1	J	AB	Zener,30V,DZ30BSB
ZD802	VHEDZ6R2BSA-1	J	AB	Zener,6.2V,DZ6.2BSA
ZD803	VHEDZ130BSB-1	J	AB	Zener,13V,DZ13BSB
ZDT21	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB

FILTERS

CF301,302	RFILF0072AFZZ	J	AG	FM IF
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0009AWZZ	J	AE	AM IF

TRANSFORMERS

⚠	PT801	RTRNP0295AWZZ	J	BD	Power,Main
⚠	PT871	RTRNP0313AWZZ	J	AN	Power,Sub
	T303	RCILA0052AWZZ	J	AE	AM Antenna
	T306	RCILB0058AWZZ	J	AC	AM Oscillation
	T351	RCILI0019AWZZ	J	AD	AM IF

COILS

	L61	VP-XHR82K0000	J	AC	0.82 µH,Choke
	L62	VP-XH2R2K0000	J	AB	2.2 µH,Choke
	L101,102	VP-MK2R2K0000	J	AC	2.2 µH,Choke
	L104	VP-MK331K0000	J	AB	330 µH,Choke
	L341	RBLN-0002AWZZ	J		Balun
	L342	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
	L351,352	VP-DH101K0000	J	AB	100 µH,Choke
	L354	RFILL0001AWZZ	J	AE	Low Pass Filter
	L601	VP-DH101K0000	J	AB	100 µH,Choke
⚠	L801	RCILZ0022AWZZ	J		Line Filter
	L920,921	RCILZ0137AFZZ	J	AA	0.29 µH
	L951	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
	LT21,22	VP-XH2R2K0000	J	AB	2.2 µH,Choke

VARIABLE CAPACITOR

VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S

VIBRATORS

X351	92LCRSTL1425A	J	AF	Crystal,456kHz
X352	RCRSP0002AWZZ	J	AH	Crystal,4.5 MHz
XL1	RCRSP0005AFZZ	J		Crystal,16.934 MHz [CD-BA1700H Only]
XL701	RCRSP0003AWZZ	J	AH	Crystal,4.19 MHz
XT21	RCRSP0010AWZZ	J	AH	Crystal,4.332 MHz

CAPACITORS

C6	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C7	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C8	VCKYTV1HB104K	J	AB	0.1 µF,50V
C11	RC-EZY474AF0J	J		0.47 µF,6.3V,Electrolytic
C12	VCKYTV1HB104K	J	AB	0.1 µF,50V
C13	VCKYTV1HB103K	J	AA	0.01 µF,50V
C14	VCKYTV1EF334Z	J	AB	0.33 µF,25V
C17	VCKYTV1HB472K	J	AA	0.0047 µF,50V
C18	VCCCTV1HH3R0C	J	AA	3 pF (CH),50V
C20,21	VCKYTV1HB104K	J	AB	0.1 µF,50V
C22	VCKYTV1HB101K	J	AA	100 pF,50V
C23	VCKYTV1HB473K	J	AA	0.047 µF,50V
C24	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C25	VCKYTV1HB104K	J	AB	0.1 µF,50V
C26	VCKYTV1HB473K	J	AA	0.047 µF,50V
C27	VCKYTV1HB104K	J	AB	0.1 µF,50V
C28	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C29,30	VCKYTV1HB104K	J	AB	0.1 µF,50V
C31	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C34	VCTYBT1EF223Z	J	AA	0.022 µF,25V
C35,36	VCCSPA1HL8R2J	J		8.2 pF,50V [CD-BA1700H Only]
C38,39	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C40	VCKYTV1HB152K	J	AA	0.0015 µF,50V
C41	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C42	VCCSTV1HL680J	J	AA	68 pF,50V
C43	VCKYTV1HB152K	J	AA	0.0015 µF,50V
C44	VCKYTV1HB104K	J	AB	0.1 µF,50V
C45	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C46	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C47	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C49,50	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C51	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C52	VCTYPA1CX103K	J	AA	0.01 µF,16V
C53	VCKYTV1HB102K	J	AA	0.001 µF,50V
C54	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
C55	VCKYTV1HB103K	J	AA	0.01 µF,50V
C56	VCEAZA0JW337M	J	AC	330 µF,6.3V,Electrolytic
C64	RC-EZY474AF0J	J		0.47 µF,6.3V,Electrolytic
C71	VCKYTV1HB101K	J	AA	100 pF,50V
C72	VCKYTV1HB103K	J	AA	0.01 µF,50V
C73~78	VCKYTV1HB101K	J	AA	100 pF,50V
C80	VCKYTV1HB104K	J	AB	0.1 µF,50V
C81~83	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C98	VCKZPA1HF223Z	J	AA	0.022 µF,50V [CD-BA1700H Only]
C99	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic [CD-BA1700H Only]
C102,103	VCKYMN1HB102K	J	AA	0.001 µF,50V
C104,105	VCKYMN1HB181K	J	AA	180 pF,50V
C106,107	VCKYMN1HB102K	J	AA	0.001 µF,50V
C108	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C112~115	VCKYMN1HB331K	J	AA	330 pF,50V
C116,117	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic
C118,119	VCTYPA1EX333K	J	AA	0.033 µF,25V
C120,121	VCKYMN1HB561K	J	AA	560 pF,50V
C122,123	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C126,127	VCKYMN1HB271K	J	AA	270 pF,50V
C128,129	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C130,131	VCTYPA1CX223K	J	AA	0.022 µF,16V
C132,133	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C134,135	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C136	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C137	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C138	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C139	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C140	VCQPKA2AA822J	J	AA	0.0082 µF,100V,Polypropylene
C141	VCQYKA1HM393K	J	AB	0.039 µF,50V,Mylar
C142	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C143,144	VCTYMN1CX222K	J	AA	0.0022 µF,16V
C148	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C150	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C301	VCTYMN1CY103N	J	AA	0.01 µF,16V
C302	VCKYMN1HB102K	J	AA	0.001 µF,50V
C321	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C323	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C326	VCKYBT1HB102K	J	AA	0.001 µF,50V
C330	VCCUMN1HJ150J	J	AA	15 pF (UJ),50V
C331	VCKZPA1HF473Z	J	AA	0.047 µF,50V
C332	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C334	VCCUMN1HJ270J	J	AA	27 pF (UJ),50V
C335	VCKYMN1HB561K	J	AA	560 pF,50V
C338	VCKYMN1HB102K	J	AA	0.001 µF,50V
C341,342	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C345~347	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C348	VCTYMN1CY103N	J	AA	0.01 µF,16V
C351	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C352	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C353,354	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C355	VCCSMN1HL220J	J	AA	22 pF,50V
C356	VCKYMN1HB102K	J	AA	0.001 µF,50V
C357	VCEAEA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C358	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C361	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C362	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C363	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C364	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C365	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C366	VCKYMN1HB102K	J	AA	0.001 µF,50V
C367,368	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C369	VCCUMN1HJ270J	J	AA	27 pF (UJ),50V
C370~372	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX153K	J	AA	0.015 µF,16V
C375	VCKYMN1HB102K	J	AA	0.001 µF,50V
C380	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C385	VCTYMN1CY103N	J	AA	0.01 µF,16V
C386	VCKYMN1HB331K	J	AA	330 pF,50V
C387	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C388	VCKYPA1HB102K	J	AA	0.001 µF,50V
C391	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C392	VCKYMN1HB102K	J	AA	0.001 µF,50V
C393	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C394	VCEAZA1CW476M	J	AB	47 µF,16V,Electrolytic
C395	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C396	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C397	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C398	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C399	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C401,402	VCKYMN1HB102K	J	AA	0.001 µF,50V
C403	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C404	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C405	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C406	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C407,408	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C409~412	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C413,414	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C417,418	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C419,420	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C421~428	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C429,430	VCKYMN1HB391K	J	AA	390 pF,50V
C439,440	VCKYPA1HB102K	J	AA	0.001 µF,50V
C441	VCTYPA1EX332K	J	AA	0.0033 µF,25V
C442	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C601	VCCSPA1HL271J	J	AA	270 pF,50V
C602	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C603,604	VCTYMN1CX682K	J	AA	0.0068 µF,16V
C605	VCKYMN1HB271K	J	AA	270 pF,50V
C606	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C607,608	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C609	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C610	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C611	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C612~614	VCEAEA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C616	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C617,618	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
C620	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C621	VCEAEA1HW105M	J	AB	1 µF,50V,Electrolytic
C622	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C623	VCCCMN1HH180J	J	AA	18 pF (CH),50V
C624	VCTYBT1EF223Z	J	AA	0.022 µF,25V
C625	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C626	VCEAEA1HW104M	J	AB	0.1 µF,50V,Electrolytic
C628	VCEAEA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C629	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C630	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C631	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C632	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C634	VCKYBT1HB102K	J	AA	0.001 µF,50V
C801,802	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C803,804	VCEAZW1HW228M	J	AH	2200 µF,50V,Electrolytic
C805,806	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C807	VCEAZW1EW338M	J	AG	3300 µF,25V,Electrolytic
C808,809	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C810	VCEAZV1HW227M	J	AD	220 µF,50V,Electrolytic
C811	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C812	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C813	VCEAZA1VW107M	J	AC	100 µF,35V,Electrolytic
C831	VCEAZA1EW227M	J	AC	220 µF,25V,Electrolytic
C832	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C833	VCEAZA1EW226M	J	AB	22 µF,25V,Electrolytic
C834	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C841,842	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C843	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C851	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C852	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C853,854	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C855	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
⚠ C871	RC-KZ001LAWZZ	J	AB	0.0047 µF,250V,AC Ceramic
C872	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C873	VCEAZV1VW477M	J	AD	470 µF,35V,Electrolytic
C874	VCEAZA0JW108M	J	AC	1000 µF,6.3V,Electrolytic
C875	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C876,877	VCKYPA1HB102K	J	AA	0.001 µF,50V
C901,902	VCCSPA1HL471J	J	AA	470 pF,50V
C903,904	VCCSPA1HL150J	J	AA	15 pF,50V
C905,906	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C907,908	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C909,910	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C911,912	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C913~916	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C917	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C920~927	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C928,929	VCKYPA1HB102K	J	AA	0.001 µF,50V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C930,931	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic [CD-BA1700H Only]
C932	VCKYPA1HB102K	J	AA	0.001 µF,50V [CD-BA1700H Only]
C933,934	VCKYPA1HB102K	J	AA	0.001 µF,50V
C935,936	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C951,952	VCCSPA1HL221J	J	AA	220 pF,50V
C971	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C972	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
CT21	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CT22	VCKZPA1HF223Z	J	AA	0.022 µF,50V
CT23	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic
CT24	VCKZPA1HF223Z	J	AA	0.022 µF,50V
CT25	VCCSPA1HL561J	J	AA	560 pF,50V
CT26,27	VCCCPA1HH220J	J	AA	22 pF (CH),50V
CT28	VCEAZA1AW476M	J	AB	47 µF,10V,Electrolytic
CT29	VCKZPA1HF223Z	J	AA	0.022 µF,50V
CT36,37	VCKZPA1HF223Z	J	AA	0.022 µF,50V
CT43	VCEAZA1CW106M	J	AC	10 µF,16V,Electrolytic

RESISTORS

	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
	VRS-TV2AB000J	J	AA	0 ohm,Jumper,1.25×2mm,Green
R3	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R4	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R5	VRS-TV2AB393J	J	AA	39 kohms,1/10W
R6	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R7	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R8	VRS-TV2AB331J	J	AA	330 ohms,1/10W
R10	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R11	VRS-TV2AB123J	J	AA	12 kohms,1/10W
R12,13	VRS-TV2AB681J	J	AA	680 ohms,1/10W
R14	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R15	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R16	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R17	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R19	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R20	VRS-TV2AB221J	J	AA	220 ohms,1/10W
R21,22	VRS-TV2AB471J	J	AA	470 ohms,1/10W
R25	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R35	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R38	VRD-ST2CD271J	J	AA	270 ohms,1/6W
R39	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R40	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R44	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R45	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R46	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R47	VRD-ST2EE3R3J	J	AA	3.3 ohms,1/4W
R48	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R50	VRS-TV2AB470J	J	AA	47 ohms,1/10W
R51~54	VRS-TV2AB683J	J	AA	68 kohms,1/10W
R55,56	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R58	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R71~78	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R79	VRS-TV2AB155J	J	AA	1.5 Mohms,1/10W
R80	VRD-ST2CD105J	J	AA	1 Mohm,1/6W
R81,82	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R83,84	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R87	VRD-ST2CD121J	J	AA	120 ohms,1/6W [CD-BA1700H Only]
R94,95	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R101,102	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R103	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R104,105	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R106,107	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R108,109	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R110	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R111,112	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R113	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R114,115	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R116,117	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R118,119	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R120,121	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R122,123	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R124,125	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R126	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R127,128	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R129,130	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R131,132	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R133,134	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R135,136	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R137	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R138	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R139	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R140	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R141	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R142,143	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R144	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R145	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R146	VRD-RT2HD820J	J	AA	82 ohms,1/2W
R147	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R148	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R149	VRD-ST2CD4R7J	J	AA	4.7 ohms,1/6W
R157	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R323	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R336	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R344	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R345	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R346	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R347	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R348	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R349	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R350	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R351	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R352	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R353	VRD-MN2BD271J	J	AA	270 ohms,1/8W
R355	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R356	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R357	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R358	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R359	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R360	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R361,362	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R363,364	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R365	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R369	VRD-MN2BD150J	J	AA	15 ohms,1/8W
R370	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R372~374	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R376	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R377	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R378	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R379	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R380	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R381	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R382	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R383	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R384	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R385	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R386	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R388	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R391,392	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R393	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R395	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R399	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R401,402	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R403,404	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
R407	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R408	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R409,410	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R415,416	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R417,418	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R419,420	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R421,422	VRD-MN2BD273J	J	AA	27 kohms,1/8W
R423,424	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R425	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R601	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R602	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R603	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R604	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R605	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R606	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R607	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R608	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R609	VRD-MN2BD474J	J	AA	470 kohms,1/8W
R610	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R611	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R612	VRD-ST2CD105J	J	AA	1 Mohm,1/6W
R613	VRD-MN2BD824J	J	AA	820 kohms,1/8W
R614	VRD-ST2CD394J	J	AA	390 kohms,1/6W
R615	VRD-MN2BD154J	J	AA	150 kohms,1/8W
R616	VRD-ST2CD102J	J	AA	1 kohm,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R617	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R618	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R619	VRD-ST2CD225J	J	AA	2.2 Mohms,1/6W
R620	VRD-MN2BD184J	J	AA	180 kohms,1/8W
R621	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R622	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R623,624	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R625~627	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R629	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R632~635	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R636	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R637	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R638	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R640	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R642	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R643,644	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R645	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R646~648	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R649	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R650	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R651,652	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R653	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R654	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R655	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R656	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R658	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R659	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R660	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R661	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R662	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R663~665	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R666	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R667,668	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R669,670	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R671	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R672	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R673~675	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R676	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R678~694	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R695~697	VRD-ST2CD681J	J	AA	680 ohms,1/6W
R698~700	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R701~703	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R704	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R705,706	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R707	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R708	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R709,710	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R711	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R712,713	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R714	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R715	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R716	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R717	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R718	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R719	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R720	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R721	VRD-ST2CD183J	J	AA	18 kohms,1/6W
R722	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R723	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R724	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R725	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R801,802	VRD-ST2EE223J	J	AA	22 kohms,1/4W
R803	VRS-VV3DA681J	J	AC	680 ohms,2W
R804	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R805	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R806	VRD-ST2CD100J	J	AA	10 ohm,1/6W
R807	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R832	VRD-RT2HD330J	J	AA	33 ohms,1/2W
R833	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R841	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R851	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R874	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R875	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R876	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R901,902	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R903,904	VRD-ST2CD821J	J	AA	820 ohms,1/6W
R905,906	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R907,908	VRN-VV3AAR10J	J		0.1 ohm,1W
R909,910	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R911,912	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R913~915	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R916,917	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
⚠ R918,919	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R920	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R921~924	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R925	VRD-ST2CD680J	J	AA	68 ohms,1/6W [CD-BA1700H Only]
R926,927	VRD-ST2CD680J	J	AA	68 ohms,1/6W
R931,932	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R933,934	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R951,952	VRD-RT2HD331J	J	AA	330 ohms,1/2W
R953,954	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R971	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R972	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R973	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R975	VRD-RT2HD4R7J	J	AA	4.7 ohms,1/2W
RT21	VRD-ST2CD104J	J	AA	100 kohm,1/6W
RT26	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RT28~30	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RT32	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RT33,34	VRD-ST2CD563J	J	AA	56 kohms,1/6W
RT35~37	VRD-ST2CD224J	J	AA	220 kohms,1/6W
RT48,49	VRD-ST2EE391J	J	AA	390 ohms,1/4W
RT51	VRD-ST2CD103J	J	AA	10 kohm,1/6W

OTHER CIRCUITRY PARTS

BI4/CNS4	QCNWN1572AWZZ	J	AF	Connector Ass'y,6/6Pin
BI99/CNS99	QCNWN1611AWZZ	J	AG	Connector Ass'y,3/3Pin [CD-BA1700H Only]
BI402/CNS402	QCNWN1561AWZZ	J	AF	Connector Ass'y,5/5Pin
BI701/CNS701	QCNWN1562AWZZ	J	AH	Connector Ass'y,10/10Pin
CNP1	QCNCM704GAWZZ	J	AC	Plug,7Pin
CNP2	QCNCM704HAFZZ	J	AC	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP3A	92LCONE6P53254	J	AC	Plug,6Pin
CNP4	QCNCM705FAFZZ	J	AB	Plug,6Pin
CNP5	92LCONE3P53254	J	AB	Plug,3Pin [CD-BA1700H Only]
CNP11	92LCONE5P53254	J	AB	Plug,5Pin
CNP12	92LCONEAP53254	J	AD	Plug,10Pin
CNP101	QCNCM705CAFZZ	J	AA	Plug,3Pin
CNP102	QCNCM705GAFZZ	J	AB	Plug,7Pin
CNP302	92LCONE2P5268	J	AB	Plug,2Pin
CNP303	QCNCM010HAWZZ	J	AC	Plug,8Pin
CNP304	QCNCW010HAWZZ	J	AD	Socket,8Pin
CNP401	QCNCWZG23AWZZ	J	AK	Plug,23Pin
CNP702	QCNCWZF23AWZZ	J	AK	Plug,23Pin
CNP703	QCNCWZF13AWZZ	J		Plug,13Pin
⚠ CNP801	QCNCM049BAWZZ	J	AC	Plug,2Pin
CNP802	QCNCM035HAWZZ	J	AB	Plug,8Pin
CNP951	QCNCW012EAWZZ	J	AC	Socket,5Pin
CNP971	92LCONE2P53253	J	AB	Plug,2Pin
CNS1A/B	QCNWN1537AWZZ	J	AG	Connector Ass'y,7/7Pin
CNS2A/B	QCNWN1538AWZZ	J	AG	Connector Ass'y,8/8Pin
CNS3A/B	QCNWN1539AWZZ	J	AE	Connector Ass'y,6/6Pin
CNS871	QCNCW012EAWZZ	J	AC	Socket,5Pin
CNS971	QCNWN1389AWZZ	J	AC	Connector Ass'y,2Pin
⚠ F801,802	92LFUSET402E	J	AD	Fuse,T4A L 250V
⚠ F803	92LFUSET202E	J		Fuse,T2A L 250V
FC701	QCNWN1564AWZZ	J	AG	Flat Cable,23Pin
FC702	QCNWN1544AWZZ	J	AE	Flat Cable,13Pin
FE301	RTUNS0012AWZZ	J	AV	FM Front End
FL701	VVKBJ749GNK-1	J	BD	FL Display
FW871	QCNWN1627AWZZ	J	AE	Flat Wire,5Pin
FW951	QCNWN1563AWZZ	J		Flat Wire,5Pin
JK951	QJAKM0004AWZZ	J	AK	Jack,Headphones
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LTWMEN7E6Y	J	AR	Motor with Worm Pulley [Loading]
M901	RMOTV0027AWZZ	J	AM	Motor,Air Cooling Fan
⚠ RL871	RRLYD0011AWZZ	J	AE	Relay
RL951	RRLYD0014AWZZ	J	AK	Relay
RX701	VHLN63H380A-1	J	AK	Remote Sensor,N63H380A
SO301A	QTANC0101AWZZ	J	AF	Terminal,FM Antenna
SO401	QSOCJ0219AWZZ	J	AD	Jack,Video/AUX
⚠ SO801	QSOCA0204AWZZ	J	AF	Socket,AC Input
SO901	QTANA0417AWZZ	J	AE	Terminal,Speaker [CD-BA160H Only]
SO902	QTANA0808AWZZ	J		Terminal,Speaker [CD-BA1700H Only]
SW1	SWMPU10780MLB	J		Switch,Push Type [Open/Close]
SW2	SWMPU11470MLB	J		Switch,Push Type [Clamp]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
SW3	SWMPU11470MLB	J		Switch,Push Type [Disc Number]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]
SW601	92LSWICH1401AT	J	AC	Switch,Key Type [ON/STAND-BY]
SW602	92LSWICH1401AT	J	AC	Switch,Key Type [CLOCK]
SW603	92LSWICH1401AT	J	AC	Switch,Key Type [TIMER/SLEEP]
SW604	92LSWICH1401AT	J	AC	Switch,Key Type [PTY TI SEARCH]
SW605	92LSWICH1401AT	J	AC	Switch,Key Type [EON]
SW606	92LSWICH1401AT	J	AC	Switch,Key Type [ASPM]
SW607	92LSWICH1401AT	J	AC	Switch,Key Type [DISPLAY MODE]
SW608	92LSWICH1401AT	J	AC	Switch,Key Type [STATION]
SW609	92LSWICH1401AT	J	AC	Switch,Key Type [DISC SKIP]
SW610	92LSWICH1401AT	J	AC	Switch,Key Type[OPEN/CLOSE]
SW611	92LSWICH1401AT	J	AC	Switch,Key Type [DIMMER]
SW612	92LSWICH1401AT	J	AC	Switch,Key Type [X-BASS]
SW613	92LSWICH1401AT	J	AC	Switch,Key Type [EQUALIZER]
SW614	92LSWICH1401AT	J	AC	Switch,Key Type [VOLUME UP]
SW615	92LSWICH1401AT	J	AC	Switch,Key Type [VOLUME DOWN]
SW616	92LSWICH1401AT	J	AC	Switch,Key Type [CD]
SW617	92LSWICH1401AT	J	AC	Switch,Key Type [TAPE]
SW618	92LSWICH1401AT	J	AC	Switch,Key Type [TUNING DOWN]
SW619	92LSWICH1401AT	J	AC	Switch,Key Type [MEMORY SET]
SW620	92LSWICH1401AT	J	AC	Switch,Key Type [REVIEW]
SW621	92LSWICH1401AT	J	AC	Switch,Key Type [FAST FORWARD]
SW622	92LSWICH1401AT	J	AC	Switch,Key Type [PLAY/REPEAT]
SW623	92LSWICH1401AT	J	AC	Switch,Key Type [STOP]
SW625	92LSWICH1401AT	J	AC	Switch,Key Type [RECORD/PAUSE]
SW626	92LSWICH1401AT	J	AC	Switch,Key Type [TUNING UP]
SW627	92LSWICH1401AT	J	AC	Switch,Key Type [VIDEO/AUX]
SW628	92LSWICH1401AT	J	AC	Switch,Key Type [TUNER (BAND)]

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LMCUSN1524A	J	AD	Cushion
⚠306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]

CABINET PARTS

201	92LCAB3292AASY	J		Front Panel Ass'y [CD-BA1700H]
201	92LCAB3289AASY	J		Front Panel Ass'y [CD-BA160H]
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	GDORF0074AWSA	J	AE	Cassette Holder,Tape 1
201- 3	GDORF0075AWSA	J	AE	Cassette Holder,Tape 2
201- 4	GCOVA1251AWSA	J	AH	Cover,Cassette Holder,Tape 1 [CD-BA1700H]
201- 4	GCOVA1251AWSB	J	AH	Cover,Cassette Holder,Tape 1 [CD-BA160H]
201- 5	GCOVA1252AWSA	J	AH	Cover,Cassette Holder,Tape 2 [CD-BA1700H]
201- 5	GCOVA1252AWSB	J	AH	Cover,Cassette Holder,Tape 2 [CD-BA160H]
201- 6	HDECQ0521AWSA	J	AD	Panel,Cassette Holder Cover, Tape 1
201- 7	HDECQ0522AWSA	J	AD	Panel,Cassette Holder Cover, Tape 2
201- 8	HDECQ0550AWSA	J	AH	Panel,AMP [CD-BA160H]
201- 8	HDECQ0558AWSA	J	AH	Panel,AMP [CD-BA1700H]
201- 9	JKNBZ0649AWSB	J	AF	Button,Volume
201-10	JKNBZ0648AWSB	J	AG	Button,Center Operation
201-11	JKNBZ0714AWSB	J	AF	Button,ON/Stand-by/Clock
201-12	JKNBZ0658AWSB	J	AF	Button,CD/Tuner
201-13	JKNBZ0659AWSB	J	AF	Button,Tape/Video/AUX
201-14	JKNBZ0660AWSB	J	AF	Button,Tuning/Time
201-15	JKNBZ0661AWSB	J	AE	Button,Dimmer
201-16	GCOVA1258AWSA	J	AB	Cover,LED
201-17	MLIFP0008AWZZ	J	AD	Damper,Cassette Holder
201-18	MSPRD0138AWFJ	J		Spring,Cassette Up,Tape 1
201-19	MSPRD0127AWFJ	J	AB	Spring,Cassette Up,Tape 2
201-20	92LBADGE1671A	J	AC	Badge,SHARP
201-21	JKNBZ0650AWSB	J	AF	Button,Disc/X-BASS/Equalizer
201-22	JKNBZ0651AWSA	J	AF	Button,RDS
202	92LCAB3283BASY	J	AM	Side Panel Ass'y,Left
202- 1	————		—	Side Panel,Left (Not Replacement Item)
202- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
203	92LCAB3283CASY	J	AM	Side Panel Ass'y,Right
203- 1	————		—	Side Panel,Right (Not Replacement Item)
203- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
204	92LCOV3289AASY	J		CD Tray Cover Ass'y [CD-BA160H]
204	92LCOV3303AASY	J	AM	CD Tray Cover Ass'y [CD-BA1700H]
204- 1	————		—	Cover.CD Tray (Not Replacement Item)
204- 2	GCOVA1254AWSB	J	AD	Panel,CD Tray Cover,Left
204- 3	GCOVA1255AWSB	J	AD	Panel,CD Tray Cover,Right
205	GCAB-1184AWSA	J	AP	Top Cabinet
206	GITAR0570AWSA	J		Rear Panel [CD-BA1700H for U.K.]
206	GITAR0575AWSA	J	AG	Rear Panel [CD-BA160H]
206	GITAR0600AWSA	J	AG	Rear Panel [CD-BA1700H for Europe]
208	LANGK0110AWFW	J	AE	Bracket,Cassette Lock,Tape 1
209	LANGK0111AWFW	J	AE	Bracket,Cassette Lock,Tape 2
210	LANGK0192AWFW	J	AD	Bracket,Fan Motor Support
213	LCHSM0094AWFW	J	AP	Main Chassis
214	LHLDZ1241AWZZ	J	AE	Holder,FL Display
219	MLOKC0003AWZZ	J	AD	Lock Lever,Cassette,Tape 1
220	MLOKC0004AWZZ	J	AD	Lock Lever,Cassette,Tape 2
221	MSPRD0109AWFJ	J	AB	Spring,Cassette Lock,Tape 1
222	MSPRD0110AWFJ	J	AB	Spring,Cassette Lock,Tape 2
223	NFANP0001AWZZ	J	AD	Rotary Fan
224	92LPT0331105	J	AM	Turntable
225	PCUSG0022AWZZ	J	AB	Cushion,Leg
226	PRDAR0148AWFW	J	AR	Heat Sink
230	QCNWN1615AWZZ	J	AC	Lug Wire
⚠231	QFSHD0001AWZZ	J	AB	Holder,Fuse
232	92LBE241414	J	AD	Belt,Loading Motor
233	92LCSPR1431C	J	AA	Ring Spring,Rotary Fan
234	92LEVA0330702	J		Cushion,Loading Chassis
235	92LMAG0104302	J		Magnet
236	92LMT0304302	J		Metal Plate,Magnet
237	92LNBAND1318A	J	AA	Nylon Band,80mm
238	92LNM0305401	J		Velvet Cushion
239	92LPT0303002	J	AB	Roller
240	92LPT0304303	J	AB	Lever,Stop
241	92LPT0304304	J		Stopper,Cam Gear
242	92LPT0304305	J	AE	Lever,Lock
243	92LPT0304306	J		Stabilizer
244	92LPT0304307	J	AC	Support,Cam Gear
245	92LPT0304308	J		Pin,Lock Gear
246	92LPT0304309	J		Cap,Pulley Stopper
247	92LPT0305413	J		Lower,Cam Gear
248	92LPT0309506	J	AD	Gear,Turntable Drive
249	92LPT0309507	J	AD	Gear,Open/Close Drive
250	92LPT0309508	J	AD	Gear,Planet
251	92LPT0309509	J	AD	Gear,Drive
252	92LPT0309510	J	AE	Pulley,Gear
253	92LPT0309511	J	AD	Gear,Middle
254	92LPT0311101	J	AB	Lever,Clamp
255	92LPT0311102	J	AC	Lever,Disc
256	92LPT0312005	J		Gear,Cam
257	92LPT0320201	J	AE	Support,Stabilizer
258	92LPT0330301	J	AU	Chassis,Loading
259	92LPT0330803	J	AK	Chassis,CD Mechanism
260	92LPT0331003	J	AT	Disc Tray

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
262	92LSP0304303	J		Spring,Stopper
263	92LSP0304305	J	AB	Spring,Lock Lever
264	92LSP0304306	J		Spring,Lock Gear Pin
267	LANGK0184AWFW	J	AG	Bracket,Main PWB
268	KMECB0011AWZZ	J	BH	Tape Mechanism Ass'y
274	92LCAUT1706A1	J	AC	Label,Class 3A Laser
275	92LCAUT1706B	J	AA	Label,Laser
276	PSHEZ0067AWZZ	J		Sheet,Main PWB
278	LANGF0039AWFW	J	AD	Bracket,Power Transformer Support
279	PSLDM3015AWFW	J	AD	Sheet,Main PWB Support
281	QLUGP0002AWZZ	J	AB	Lug Pin
282	QLUGP0001AWZZ	J	AC	Lug Terminal
601	XBBSD20P04000	J	AA	Screw,ø2×4mm
602	LX-JZ0004AWFD	J	AA	Screw,ø3×12mm
603	92LSC0308MBZI	J	AB	Screw,ø3×8mm
604	XEBSD30P12000	J	AA	Screw,ø3×12mm
605	XESSD30P10000	J	AA	Screw,ø3×10mm
606	XHBSD26P04000	J	AA	Screw,ø2.6×4mm
607	XJBSD30P12000	J	AA	Screw,ø3×12mm
608	XJBSD30P14000	J	AA	Screw,ø3×14mm
609	XJBSF30P12000	J	AA	Screw,ø3×12mm
611	XJSSD30P10000	J	AA	Screw,ø3×10mm
612	LX-HZ0009AWFD	J	AC	Screw,Special
613	LX-HZ0169AFFD	J	AA	Screw,ø4×12mm
614	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
615	XEBSD30P10000	J	AA	Screw,ø3×10mm
616	LX-BZ2222AXZZ	J		Screw,Special
617	92LSC0308RBZI	J		Screw,ø3×8mm
618	XJBSD30P10000	J	AA	Screw,ø3×10mm

ACCESSORIES/PACKING PARTS

1	SPAKP0013AWZZ	J	AC	Polyethylene Bag,Unit
2	92L411-0075	J	AG	Polyethylene Bag,Front Speaker
3	SPAKA0245AWZZ	J		Packing Add.,Left/Right
4	92L412-0148	J	AM	Packing Add.,Top/Bottom,Front Speaker
5	TLABZ0690AWZZ	J		Label,Feature,Tape 1 [For Europe Only]
6	TLABZ0691AWZZ	J		Label,Feature,Tape 2 [CD-BA160H]
6	TLABZ0693AWZZ	J		Label,Feature,Tape 2 [CD-BA1700H for U.K.]
6	TLABZ0697AWZZ	J		Label,Feature,Tape 2 [CD-BA1700H for Europe]
7	QANTL0008AWZZ	J	AH	AM Loop Antenna
⚠8	QACCB0008AW00	J	AW	AC Power Supply Cord [For U.K.]
⚠8	QACCE0011AW00	J	AM	AC Power Supply Cord [For Europe]
9	RRMCG0219AWSA	J	AR	Remote Control
9- 1	GFTAB1022AWSB	J	AK	Battery Lid,Remote Control
10	TINSE0312AWZZ	J	AG	Operation Manual [CD-BA1700H for U.K.]
10	TINSZ0550AWZZ	J	AS	Operation Manual [CD-BA160H]
10	TINSZ0569AWZZ	J	AS	Operation Manual [CD-BA1700H for Europe]
11	TINSE0313AWZZ	J	AB	Quick Guide [CD-BA1700H for U.K. Only]
13	TLABZ0604AWZZ	J	AB	Label,Energy [For Europe Only]
14	TLABZ0605AWZZ	J	AB	Label,Saving Energy
15	92LBAG1460C1	J	AB	Polyethylene Bag,Accessories
16	92LBAG1770A	J	AB	Polyethylene Bag,AC Power Supply Cord
17	92LFANT1535A	J	AF	FM Antenna
18	SPAKC0886AWZZ	J		Packing Case [CD-BA160H]
18	SPAKC0892AWZZ	J		Packing Case [CD-BA1700H for Europe]
18	SPAKC1028AWZZ	J		Packing Case [CD-BA1700H for U.K.]
19	TGAN-3170UMZZ	J	AE	Warranty Card [For U.K.Only]
20	SPAKZ0573AWZZ	J		Sheet,CD Tray
21	TLABE0373AWZZ	J		Label,Bar Code [CD-BA160H]
21	TLABE0406AWZZ	J		Label,Bar Code [CD-BA1700H for Europe]
21	TLABE0408AWZZ	J		Label,Bar Code [CD-BA1700H for U.K.]
22	92L16-01-0002	J	AF	Polyethylene Bag, Surround Speaker
23	92L416-0068	J	AC	Packing Add.,Top/Bottom, Surround Speaker

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~3	92LPWB3289MANS	J	—	Main/Display/Headphones (Combined Ass'y)[CD-BA160H]
PWB-A1~4	92LPWB3292MANS	J	—	Main/Display/Headphones/Digital Output (Combined Ass'y) [CD-BA1700H]
PWB-B	92LPWB3284PWRS	J	—	Power
PWB-C	92LPWB3303CDUS	J	—	CD Servo
PWB-D	92LPWB3284RDSS	J	—	RDS
PWB-E	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)
PWB-F	92LPC99C017	J		CD Loading Motor (PWB Only)
PWB-G	————		—	Tape Mechanism (Not Replacement Item)

OTHER SERVICE PART

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

CP-BA160H

SPEAKER BOX PARTS (Front Speaker)

901	92L126-0015	J	BE	Front Panel Ass'y,Left
902	92L126-0016	J	BE	Front Panel Ass'y,Right
903	92L121-0196	J	AN	Net Frame Ass'y
904	92L051-0099	J	AY	Speaker Box Ass'y,Left
905	92L051-0100	J	AY	Speaker Box Ass'y,Right
907	92L394-0056	J	AC	Foot Cushion
908	92L394-0059	J	AC	Port Cushion
909	92L351-0363	J		Label,Specifications
910	92L319-0027	J	AE	Catching Holder
911	92L372-0027	J	AC	Screw,ø3×10mm
912	92L372-0124	J	AB	Screw,ø4×12mm
913	92L122-0048	J	AG	Speaker Cord Ass'y (With Capacitor C1,2)
914	92L291-0079	J	AG	Speaker Cord
SP1,2	VSPA010WB13CA	J	AV	Woofer
SP3,4	VSPA010WB13CA	J	AV	Woofer,Sub
SP5,6	VSP0051TBN46A	J	AQ	Tweeter

CP-BA1700H

SPEAKER BOX PARTS (Front Speaker)

901	92L126-0017	J	BA	Front Panel Ass'y,Left
902	92L126-0018	J	BA	Front Panel Ass'y,Right
903	92L121-0196	J	AN	Net Frame Ass'y
904	92L051-0099	J	AY	Speaker Box Ass'y,Left
905	92L051-0100	J	AY	Speaker Box Ass'y,Right
907	92L394-0056	J	AC	Foot Cushion
908	92L394-0059	J	AC	Port Cushion
909	92L351-0375	J	AB	Label,Specifications
910	92L319-0027	J	AE	Catching Holder
911	92L372-0027	J	AC	Screw,ø3×10mm
912	92L372-0124	J	AB	Screw,ø4×12mm
913	92L122-0048	J	AG	Speaker Cord Ass'y (With Capacitor C1,2)
914	92L291-0079	J	AG	Speaker Cord
SP1,2	VSPA010WB24WA	J	AU	Woofer
SP3,4	VSPA010WB24WA	J	AU	Woofer,Sub
SP5,6	VSP0051TBN98A	J	AQ	Tweeter

GBOXS0041AWM1

SPEAKER BOX PARTS (Surround Speaker) (CD-BA1700H Only)

901	92L32-01-0460	J		Bottom Cabinet
902	92L60-00-1190	J		Net Frame Ass'y
903	92L33-01-1430	J		Label,Parts Code
904	92L37-03-0110	J	AK	Speaker Cord
905	92L35-02-0320	J	AB	Screw,ø3×14mm
SP1,2	VSPA010PB23WA	J		Speaker,Full Range

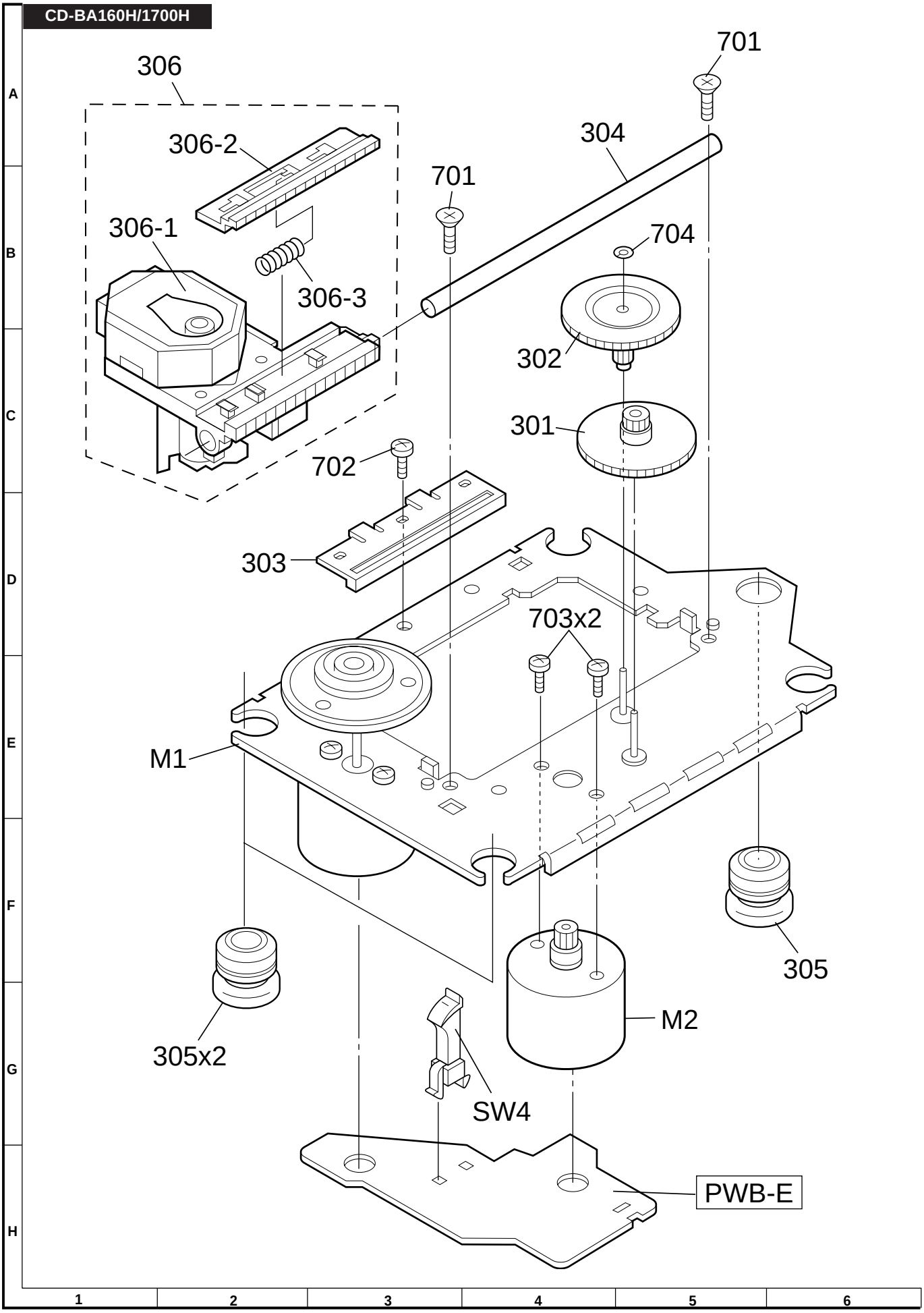
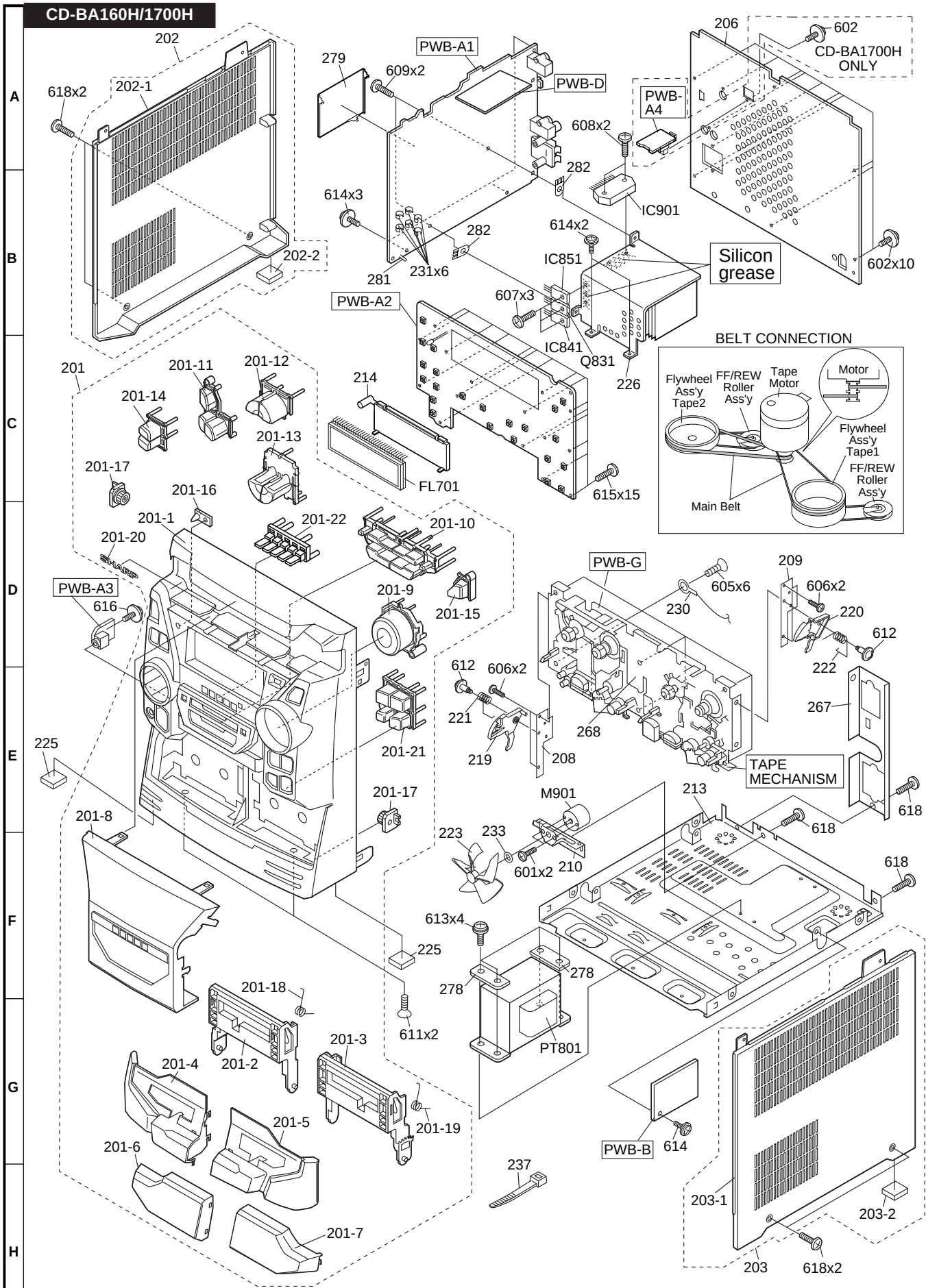


Figure 7 CD MECHANISM EXPLODED VIEW



Note: Only tape mechanism assembly and consumable parts are supplied for replacement purposes.

Figure 8 CABINET EXPLODED VIEW (1/2)

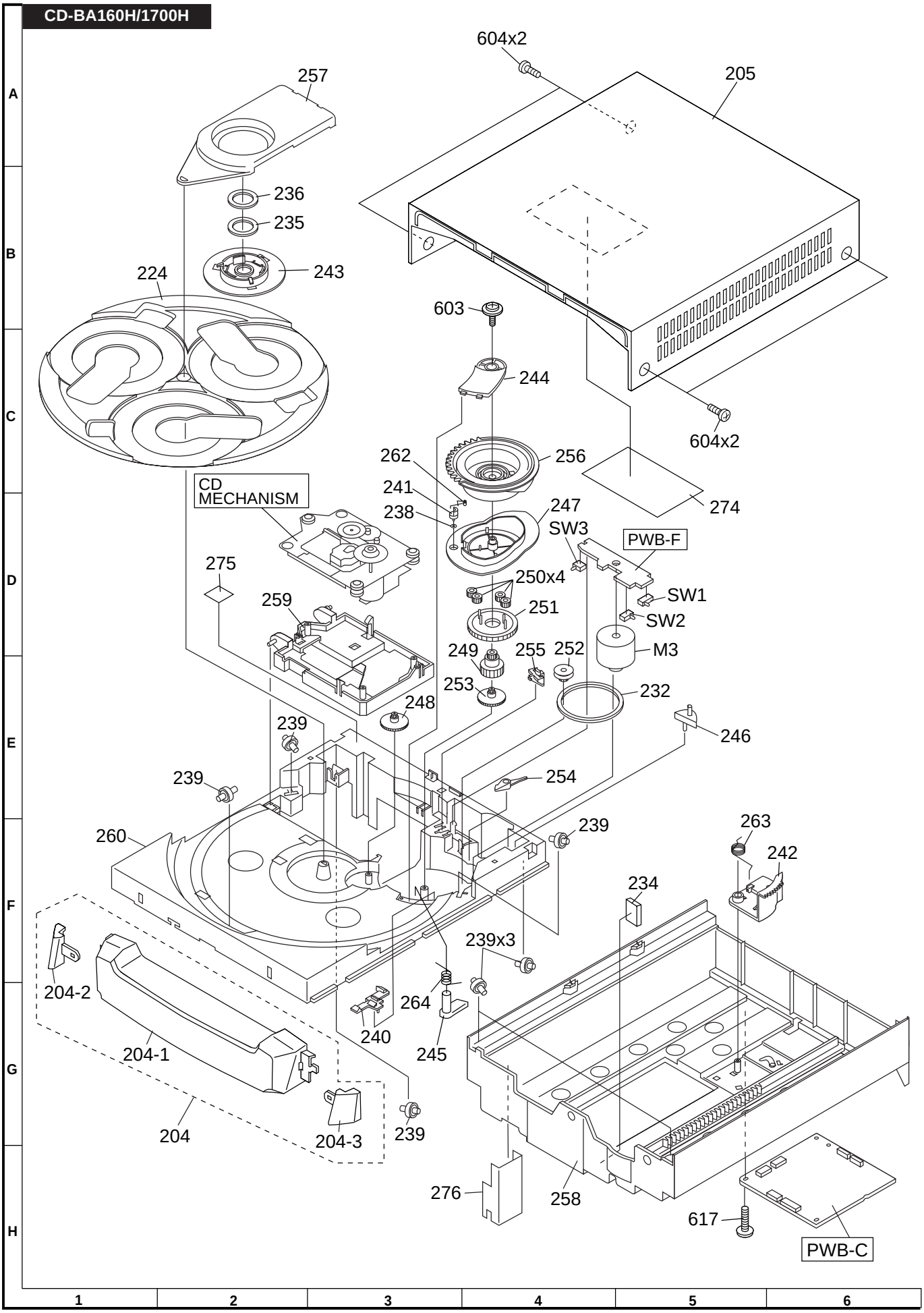


Figure 9 CABINET EXPLODED VIEW (2/2)

CP-BA160H/1700H **Front Speaker**

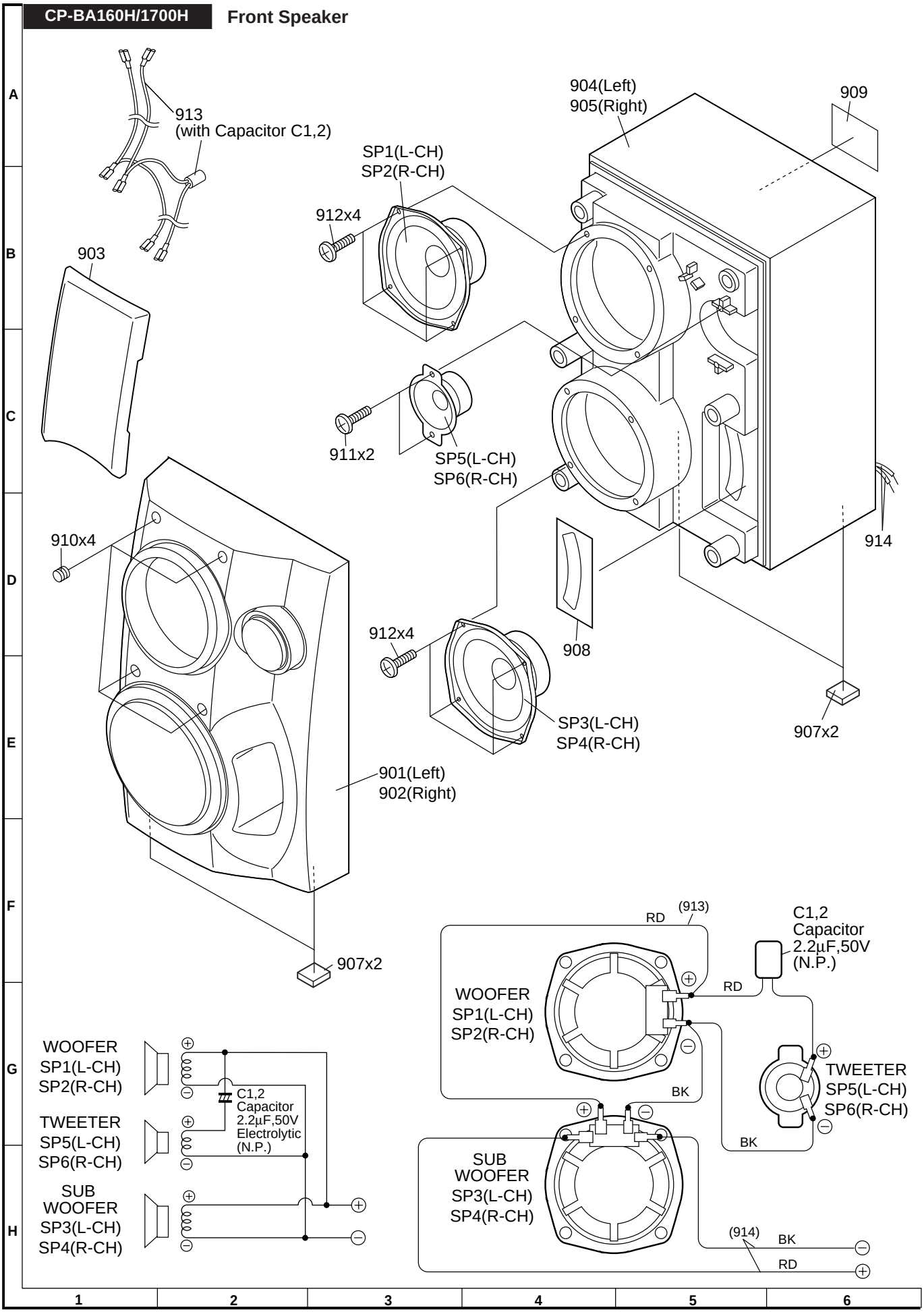


Figure 10 SPEAKER EXPLODED VIEW (1/2)

GBOXS0041AWM1 **Surround Speaker (CD-BA1700H Only)**

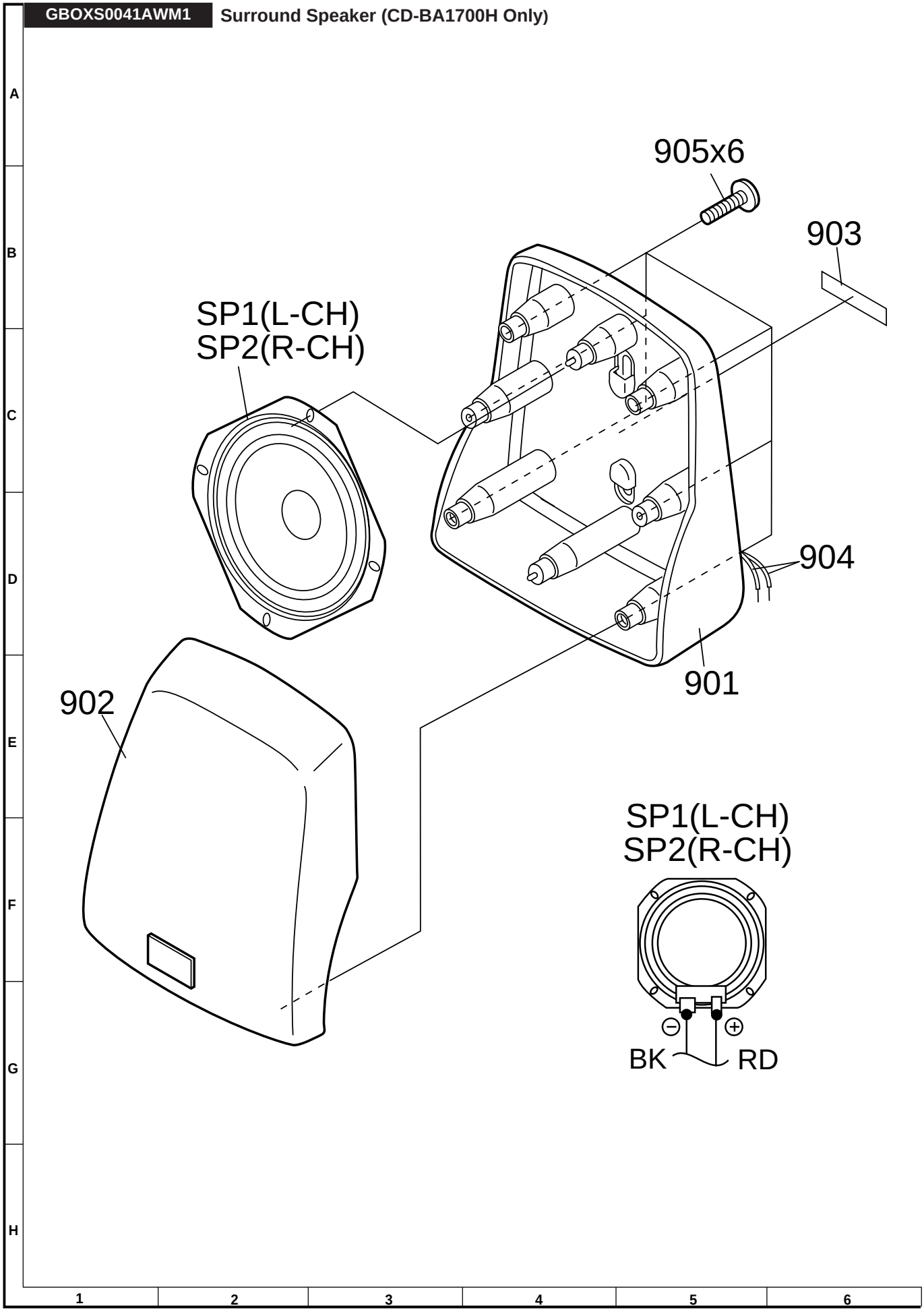


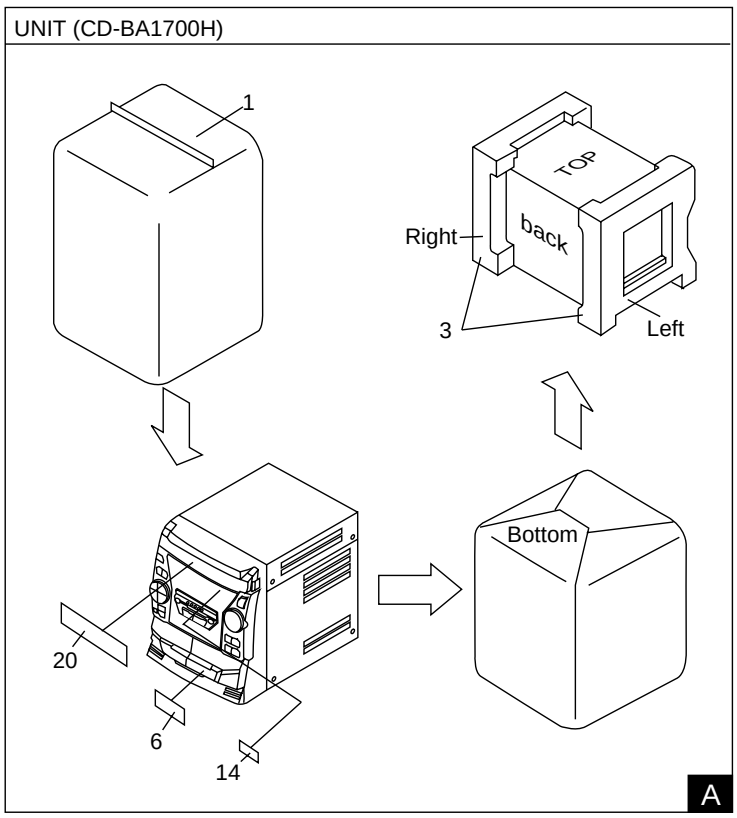
Figure 11 SPEAKER EXPLODED VIEW (2/2)

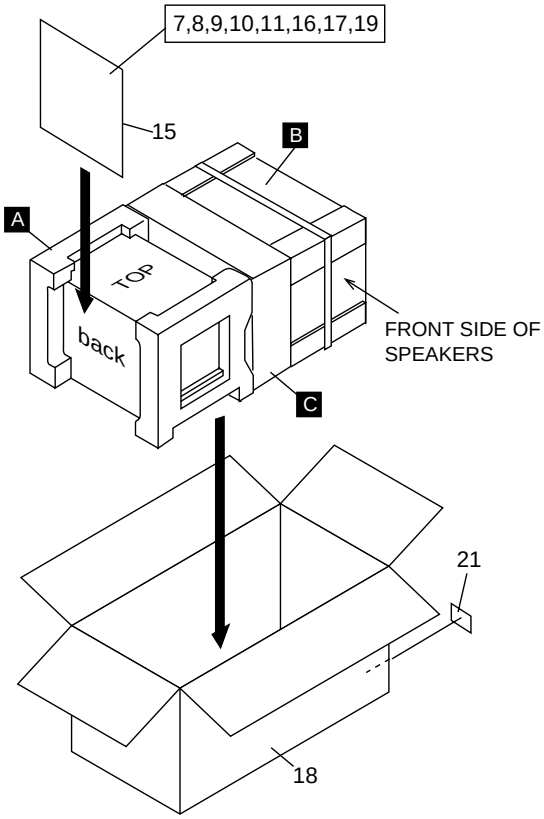
PACKING METHOD (CD-BA1700H FOR U.K. ONLY)

Setting position of switches and knobs	
Tape Mechanism	STOP

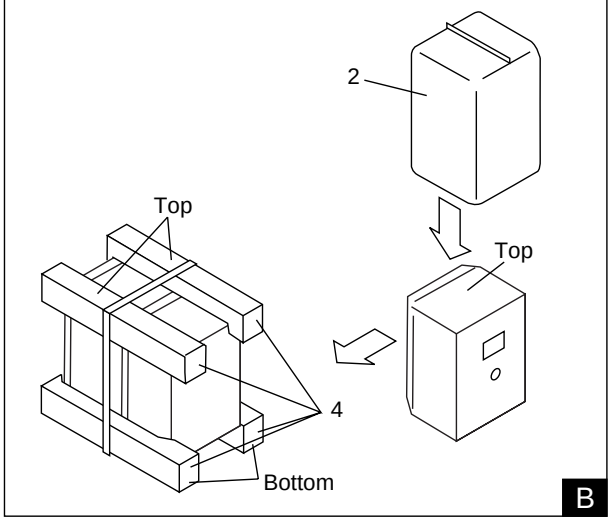
1	Polyethylene Bag,Unit	SPAKP0013AWZZ
2	Polyethylene Bag,Front Speaker	92L411-0075
3	Packing Add.,Left/Right	SPAKA0245AWZZ
4	Packing Add.,Top/Bottom Front Speaker	92L412-0148
6	Feature Label,Tape 2	TLABZ0693AWZZ
7	AM Loop Antenna	QANTL0008AWZZ
8	AC Power Supply Cord	QACCB0008AW00
9	Remote Control	RRMCG0219AWSA
10	Operation Manual	TiNSE0312AWZZ
11	Quick Guide	TiNSE0313AWZZ
14	Label,Saving Energy	TLABZ0605AWZZ
15	Polyethylene Bag,Accessories	92LBAG1460C1
16	Polyethylene Bag, AC Power Supply Cord	92LBAG1770A
17	FM Antenna	92LFANT1535A
18	Packing Case	SPAKC1028AWZZ
19	Warranty Card	TGAN-3170UMZZ
20	Sheet,CD Tray	SPAKZ0573AWZZ
21	Label,Bar Code	TLABE0408AWZZ
22	Polyethylene Bag,Surround Speaker	92L16-01-0002
23	Packing Add.,Top/Bottom, Surround Speaker	92L416-0068

UNIT (CD-BA1700H)

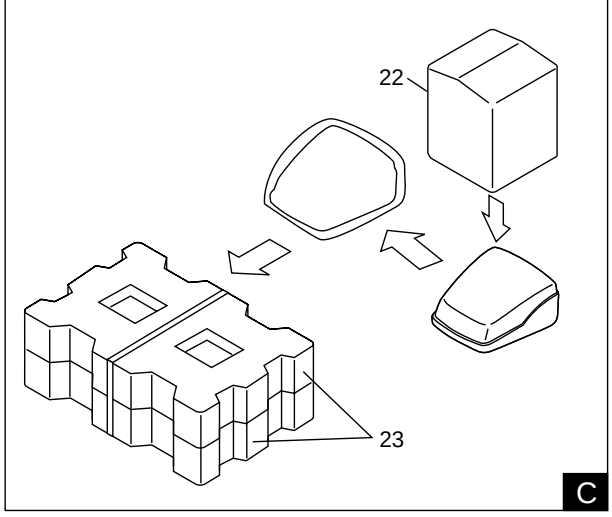




FRONT SPEAKER	CP-BA1700H



SURROUND SPEAKER	GBOXS0041AWM1



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